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SKIN DISEASES

AND

THEIR REMEDIES.

BY THE SAME AUTHOR,

In course of preparation,

PHOTOGRAPHS OF SKIN DISEASES.

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SKIN DISEASES

AND

THEIR REMEDIES.

BY

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P R E F A C E.

I HAVE often thought that there was a want of a brief, yet exact, work on Skin Diseases, which might serve as a handy-book for reference. I have endeavoured to supply this want, and in doing this I have attempted, first, to show that a practical lesson of great present import is to be derived from the study of the early history of Skin Diseases in Europe, and, secondly, to set forth clearly, yet succinctly, the characters, distinguishing marks, causes, and most trustworthy methods of treatment of the diseases in question. I have aimed at

making a thoroughly useful and practical book, and I have striven to avoid questions which have not an immediate bearing upon the causation, diagnosis, and treatment of these too often obstinate affections.

R. J. J.

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SKIN DISEASES

AND

THEIR REMEDIES.

INTRODUCTION.

HISTORY has no stories of sadder interest than those recited of the ravages of SKIN DISEASES. Our most ancient records show us humanity seared by these grievous affections. Even when such details fail as might guide to a scientific appreciation of the cutaneous disorders which hold a prominent place in remote history, still there does not want incidental matter which brings very closely home to us the abiding interest which belongs to the very earliest accounts we possess of the graver maladies which are apt to prey upon the skin.

JOB, smitten with sore boils, from the sole of his foot to his crown, seats himself amidst the ashes, in the open air, without the wall of the city, and taking a potsherd in his hand to scrape himself withal,¹ exclaims :—

“ My flesh is clothed with worms and clods of dust ; my skin is broken, and become loathsome.²

“ My kinsfolk have failed, and my familiar friends have forgotten me. . . .

“ My breath is strange to my wife, though I intreated her for the children’s sake of mine own body.

“ Yea, young children despised me : I arose, and they spoke against me.

“ All my inward thoughts abhorred me : and they whom I loved are turned against me.

“ My bone cleaveth to my skin and to my flesh

“ Have pity upon me, have pity upon me, O ye my friends, for the hand of God hath touched me.

“ Why do ye persecute me as God, and are not satisfied with my flesh ?”³

¹ Job ii, 7, 8. ² Job vii, 5. ³ Job xix, 14, 17-22.

Is not this the story, and would not this have been the language of the leper-stricken woman, who, in the Shetland Islands, so recently as 1779, was driven away from the habitations into the fields, and there died before a shelter was erected over her?

Nay, if search were made, many a parallel of the story would yet be found as well in the Occident as the Orient;—in the West Indies and South America, in Greece and North Africa, and throughout the southern lands of Asia, and in the eastern Archipelago, the leper is still driven from the haunts of men, too often an outcast for ever.

Still more closely home to us is brought a reflex of those terrible plagues, which, having their chief character stamped upon the skin, and running an acute course, ravaged the earlier and middle ages. Neither the plague of boils which fell upon the Egyptians of old, nor the furuncular, nor miliary and petechial plagues of the middle ages, surpassed in their horrible devastations the maculated fever which, pest-like, swept over Ireland in the track of the terrible famine of 1847.

We read in the ‘Decameron’ of Boccacio,

that when the great furuncular plague of the 14th century attacked Florence,—

“One citizen fled from another—a neighbour from his neighbours—a relation from his relations; and in the end, so completely had terror extinguished every kindlier feeling, that the brother forsook the brother—the sister the sister—the wife her husband, and at last, even the parent his own offspring, and abandoned them, unvisited and unsoothed, to their fate. . . . Among the middling classes, and especially the poor, the misery was still greater. Poverty or negligence induced most of these to remain in their dwellings, or in the immediate neighbourhood; and thus they fell by thousands: and many ended their lives in the streets, by day and by night. The stench of putrefying corpses was often the first indication to their neighbours that more deaths had occurred. The survivors, to preserve themselves from infection, generally had the bodies taken out of the houses, and laid before the doors; where the early morn found them in heaps, exposed to the affrighted gaze of the passing stranger. It was no longer possible to have a bier for every corpse,—three or four were generally laid

together; husband and wife, father and mother, with two or three children, were frequently borne to the grave on the same bier; and it oftener happened that two priests would accompany a coffin, bearing the cross before it, and be joined on the way by several other funerals; so that instead of one, there were five or six bodies for interment."

We read in the journals and contemporary records of 1846-47, such recitals as follows:—

December, 1846.—“A terrible apathy hangs over the poor of Skibbereen; starvation has destroyed every generous sympathy; despair has made them hardened and insensible, and they sullenly await their doom with indifference and without fear. Death is in every hovel; disease and famine, its dread precursors, have fastened on the young and old, the strong and the feeble, the mother and the infant; whole families lie together on the damp floor, devoured by fever, without a human being to wet their burning lips, or raise their languid heads; the husband dies by the side of the wife, and she knows not that he is beyond the reach of earthly suffering; the same rag covers the festering remains of mortality and the

skeleton forms of the living, who are unconscious of the horrible contiguity; rats devour the corpse, and there is no energy among the living to searc them from their horrid banquet; fathers bury their children without a sigh, and cover them in shallow graves, round which no weeping mother, no sympathising friends, are grouped; one seanty funeral is followed by another and another. Without food or fuel, bed or bedding, whole families are shut up in naked hovels, dropping one by one into the arms of death.”¹

May, 1847; 7th.—“The number of patients in the Cork Fever Hospital was 725; and fever was committing fearful ravages in Ballindine, Ballinrobe, Claremorris, Westport, Ballina, Swineford, and Belmullet, all in the county of Mayo.”² 11th.—“The increase of fever in Roseommon is truly awful; our hospitals are full, and applicants are daily refused admission. No one can tell what becomes of these unhappy beings; they are brought away by their pauper friends, and no more is heard of them.

¹ ‘Cork Examiner.’ See ‘Census of Ireland for 1851,’ pt. 5, vol. i, p. 272.

² ‘Freeman’s Journal.’

Seven bodies were found inside a hedge, in the parish of Kilglass; the dogs had the flesh almost eaten off.”¹

August, 1847. Dublin.—“At the gate leading to the temporary fever hospital, erected near Kilmainham, were men, women, and children, lying along the pathway, and in the gutter, awaiting their turn to be admitted. Some were stretched at full length, with their faces exposed to the full glare of the sun, their mouths open, and their black and parched tongues and encrusted teeth visible even from a distance. Some women had children at the breast, who lay beside them in silence and apparent exhaustion—the fountain of their life being dried up; whilst in the centre of the road stood a cart containing a whole family, who had been smitten down together by the terrible typhus, and had been brought there by the charity of a neighbour. Inside the hospital enclosure was a small open shed, in which were thirty-five human beings, heaped indiscriminately on a little straw thrown on the ground. Several had been thus, for three days,

¹ ‘Saunders’s News-Letter,’ Irish Census, 1851, pt. 5, vol. i, p. 296.

drenehed by rain, &c. Some were unconscious, others dying; two died during the night.”¹

I. We propose, first, to recount the chief points connected with the history of ehronic skin diseases in Europe. This portion alone of the records of these affections can, perhaps, be clearly set forth, and it is the most instructive; for, from it, we learn somewhat concerning the causes of skin diseases; and this is what we principally seek to ascertain from history.

We take up our story in the first century of the Christian era.

Pliny, the *naturalist*, wrote of his time, that “The face of man has recently been sensible of new forms of disease, unknown in ancient times, not only to Italy, but to almost the whole of Europe. Still, however, they have not as yet extended to the whole of Italy, nor have they made any great inroads in Illyrieum, Gaul, or Spain, or, indeed, any other parts, to so great an extent as in Rome and its environs. Though unattended with pain, and not dangerous to life,

¹ Dr. Curran, in ‘Freeman’s Journal.’ Irish Census, 1851, pt. 5, vol. i, p. 297.

these diseases are of so loathsome a nature, that any form of death would be preferable to them.”¹

He then proceeds to describe² the nature of *lichen*. The exact character of this skin affection cannot be precisely ascertained from his description; but it is usually regarded as having been a variety of tubercular leprosy. He speaks of this affection as being “the most insupportable” of all the new forms of disease to which he has referred, and “the one, which, after its Greek appellation, is known to us as ‘liehen.’” He then continues:—

“In consequence, however, of its generally making its first appearance at the chin, the Latins, by way of joke, originally—so prone are mankind to make a jest of the misfortunes of others—gave it the name of ‘mentagra,’ an appellation which has since become established in general use. In many cases this disease spreads over the interior of the mouth, and takes possession of the whole face, with the sole exception of the eyes; after which, it passes downwards to the neck, breast, and

¹ ‘Nat. Hist.’ b. xxvi, c. 1.

² Ib. b. xxvi, c. 2.

hands, covering them with foul furfuraceous eruptions."

This "curse," Pliny asserts, was unknown to the ancients; and he states that it first entered Italy in the middle of the reign of the Emperor Tiberius Claudius Cæsar, and that it was introduced from Asia, where it was also known. The affection spread chiefly among the nobler classes. This was attributed to the contagious nature of the disease, and to the habit of salutation by kissing practised by the aristocracy; and so formidable were the effects of the affection, that this custom was done away with by edict. The disease was most intractable, and physicians were even brought to Rome from Egypt, "the fruitful parent," writes Pliny, "of maladies of this nature; and very considerable were the profits they made. At all events it is a well-known fact, that Marilius Cornutus, a personage of prætorian rank, and legatus of the province of Aquitana, expended no less than 200,000 sesterces¹ upon his cure."²

Pliny then remarks, "It is much more fre-

¹ About £1500.

² 'Nat. Hist.' b. xxvi, c. 3.

quently that we hear of new forms of diseases attacking the lower orders; a singular fact, and one quite unequalled for the marvellous phenomena which sometimes attend these outbreaks. Thus, for instance, we find an epidemic suddenly making its appearance in a certain country, and then confining itself, as though it had made its election so to do, to certain parts of the body, certain ages, and even certain pursuits in life. In the same way, too, while one class of diseases attacks the young, another confines itself to adults; while one malady extends itself to the higher classes, another is felt exclusively by the poor."

Subsequently,¹ Pliny states that elephantiasis, the true tubercular leprosy, was unknown in Italy before the time of Pompeius Magnus, and that this disease was imported by the troops of that general from Asia. He tells us, however, that the course of the affection in Italy came very soon to a close.

According to Plutarch,² neither elephantiasis nor the other leprous affections prevailing in

¹ 'Nat. Hist.' b. xxvi, c. 5.

² Sympos. lib. viii, q. ix.

his time were of such late date as Pliny would have them to be. The authority of Athenodorus, the philosopher, is cited by Plutarch for the long-standing existence of elephantiasis in Italy; and he responds to the physician Philo, who held that the disease was comparatively a new one, that it, as well as the allied disorders, had solely become more common and more violent, and that a greater prevalence and increased intensity of these affections had led to the error of supposing that they were new diseases.

It has been suggested that to the existence of tubercular leprosy in Greece at remote periods, and to the horrible deformity arising from this affection, as well as to the libidinous desires occasionally manifested during its course, we probably owe the myth of the satyrs. It has also been suggested that plicose hair (*Plica Polonica*) might have originated the fable of Medusa's head. These ingenious suppositions are worthy of a passing notice.

It would seem that the chronic skin diseases (whatever their nature may have been) which were regarded by Pliny as being novel in his

day, had become familiar to physicians in the second century of the Christian era. It may be surmised that these skin affections spread over occidental Europe, wherever the Roman legions passed; but it is probable that the frequency of occurrence and intensity which characterised the diseases when they first manifested themselves, whether as novel disorders or as an epidemic outbreak of sporadic, although rare diseases, quickly became mitigated. The intensity and frequency soon declined; but the form impressed upon the affections during this epidemic outbreak became, so to speak, abiding.

In fact, so far as we can gather from history, there would appear to have been, during the two first centuries of our era, a true epidemic of certain severe forms of chronic skin diseases in Italy, and probably elsewhere in Europe. Moreover, at the commencement of this epidemic, we find observers (as at the beginning of the epidemics of our own days) assigning its origin to two different sources; the one, to importation into the country from without by contagion; the other, to development from within.

II. We pass now to the midst of the 12th

century—a great stride, but the records of the intervening period are too few and obscure to enable us to depict the general state of chronic skin diseases in that space of time. We know that many of these affections did not then fail to harass man; and perhaps we may reasonably presume that they existed in varying degrees of prevalence and intensity during the pestilential periods of the first portion of the Christian era.

In the 12th century, it had become manifest that skin affections had undergone a remarkable epidemic modification. They had increased largely both in amount and intensity; and the most formidable of these diseases, tubercular leprosy, assumed a horrible prominence in the social life of this period and of that which immediately followed.

It has been very commonly supposed that the tubercular leprosy which prevailed so extensively and severely throughout Europe from the 12th to the 16th century, inclusive, had been imported into the Occident at the return of the first Crusaders. The incorrectness of this opinion is clearly shown by the fact, that the disease was already well known in different parts of Europe

previous to the first crusade. Muratori records¹ that in A.D. 630, Rotharis, king of the Lombards, promulgated a law which enacted that lepers were civilly dead; and that if poverty compelled them to seek alms, they were not to approach too near healthy persons, and were to make their presence known by striking two pieces of wood together. The Lombards were looked upon, in the 8th century, as being a nation infected with the most horrible leprosy. Again, King Pepin, of France, at a parliament convoked at Compiègne in 757, established capitularies for the dissolution of the marriage of lepers; and in 789, he prohibited these unfortunates from mingling with healthy individuals.

The general outbreak of leprosy in the middle ages may be said to date its origin from the tenth century. From this period we may also date the commencement of that epidemic or exaggerated manifestation of chronic skin diseases which may be regarded as having persisted throughout six centuries, and which originated and was developed contemporaneously with the

¹ 'Antiq. Ital. Med. Ævi,' &c., t. ii, diss. xvi.

great pestilential epoch which culminated in the fourteenth century.

It is necessary to remark, that the earlier modern writers on medicine jumbled together the Latin and Arabian designations of skin diseases in a manner that led to no ordinary confusion. The term leprosy, with them and long subsequently, included almost every variety of severe chronic skin disease. Guy of Chauliac maintained that there was little necessity for distinguishing lepra, alphos, melas, impetigo, gutta rosacea, and such like cutaneous complaints, from one another, as they are all varieties of the same affection.*

The chief circumstances bearing upon the

¹ Adams—Translation of 'Paulus Ægineta,' b. iv, sce. ii. Comment:—"The leuce of the Greeks, the leuce and fourth species of impetigo of Celsus, and the albaras of most of the Arabians, are the same as the *lepra vulgaris* of Drs. Wilson and Bateman; the alphos of most of the Greek authorities and of Celsus, and the morphea alba of most of the Arabians, correspond to the *lepra alphoides* of our English nosologists; the melas, alphos niger, and common lepra of the Greeks, Celsus's third species of impetigo, and his melas, and the morphea nigra and impetigo of most of the Arabian translators, apply to the *lepra nigricans* of our modern arrangement; and the psora of the Greeks, Celsus's second species of impetigo, and the

inordinate prevalence of chronic skin diseases in the middle ages have been so admirably set forth by M. Raymond, in his 'History of Elephantiasis,' and serve so well to show the links of connection existing between the causation of chronic and acute cutaneous affections, that we shall adhere very closely to his account, more particularly as his work is a rare one.¹

For the three hundred years which preceded its destruction in the fifth century, the Roman Empire had been assailed on all sides by the northern barbarians. During this long struggle the most beautiful part of Europe had been

scabies of Octavius Horatianus, and of most of the Arabian translators, comprehend both the *psoriasis* and scabies of Wilson and Bateman. Since many of the ancient authorities speak of *scabies* as being infectious, they must have applied the term to the true itch, with which it is not likely, as Rayer maintains, that they were wholly unacquainted."

¹ 'Histoire de l'Eléphantiasis, contenant aussi l'origine du Scorbute, du Feu St. Antonie, de la Vérole, &c., avec un précis de l'histoire physique des temps. Par M. Raymond, Docteur en Médecine de la Faculté de Montpellier, agrégé au Collège des Médecins de Marseille, et Membre de l'Académie des Belles Lettres de cette même Ville, &c, &c. Lausanne, 1767.

devastated; the open country was ill cultivated, and lands which had hitherto borne rich harvests were now overrun with wild plants. Everywhere stagnant waters met the eye, insects were vastly multiplied, and wheat, wine, and flocks became very rare. The arts fell into decay, the clothing was miserable, and the dwellings were damp and unhealthy. Southern France, which under the Roman Government had reached the first rank for husbandry, for riches, and for the dignity and good breeding of its inhabitants, suffered especially in the degradation and ruin of southern and western Europe.

The disorder of states reached its highest pitch in the tenth century, at the death of Louis le Débonnaire. The authority of the sovereign having been usurped and divided by an infinity of military officers, who became as many tyrants of different orders, the feudal system—that is to say, anarchy and confusion—was established. A new tyranny, superstition, or an enormous abuse of religion, was born also from this degradation of the species; and after it had spoiled the nations of their wretched physical necessities, it multiplied still more

their sufferings by wars without end. Physieal disorder necessarily begets civil disorder. The desolation of the open eountry in this period was extreme, and cultivated lands were covered by a forest-growth, or inundated, or converted into swamps. The people dwelt for the most part in muddy and marshy plaees, and many eebrated cities had no better situation. Nothing could be wilder than the arehiteecture of the time, and buildings were ereeted indifferently upon the northern slopes of mountains, in unhealthy localities, and upon the borders of stagnant pools. The houses were commonly a kind of hovel, eonstrueted of straw, reeds, and stakes, cemented with mud, without convenienees, and without even ehimneys. Dwellings of this kind were still to be found in England in the fourteenth eentury. Torehes were used to obtain light at night; and in the eentury following, glass windows were still a luxury in Franee. The cities were often burned, and the streets were unpaved and undrained. Agrieulture was negleeted to so great a degree, that even in Italy wine was not eommon in the thirteenth eentury, and it was but little known in the remainder of the Oeeident. In England,

in the next century, wine was only to be found in the apothecaries' shops, where it was sold as a cordial. In this kingdom also husbandry was then in an exceedingly low state, and the different kinds of grain were scarcely to be had. Flocks constituted then the chief of our riches, and the food consisted principally of flesh, fresh in summer, salted in winter. The olive had nearly disappeared since the age of Charlemagne. This tree, as well as the vine, was often destroyed by the frequent recurrence of winters of such severity that the great rivers, the gulfs of the Mediterranean, and the wine in the cellars, were thickly frozen.

Since the sixth century, the rains had been excessive, inundations frequent, the cold seasons extreme, and remarkable igneous meteors never long absent. Famines also were as horrible as frequent. From A.D. 606 to A.D. 1309 they recurred so often that, supposing each to have persisted six months, the mean interval was only seven years.

The infection of the air, which resulted from the abandonment of the open country, shortened life exceedingly. M. Raymond calculates that

the mean life in the dwellings situated near the marshes of Provence, was from eighteen to twenty years, while in other localities of the same district it was from thirty to fifty; and he thinks that the mean duration of life would not exceed these limits in a large portion of Europe, where the majority of the inhabited places were situated in the midst of mud and stagnant waters, and where frequent epidemics made strange ravages.

Diseases were multiplied in a prodigious manner in this calamitous space of time. A comparison of the frequency of epidemics before and after the destruction of the Roman Empire is a demonstrative proof of this. From the foundation of Rome until the reign of Augustus, a space of 732 years, we count, according to the calculations of Kireher, thirty-three pestilences, or great epidemics, in Italy or extending over Europe. Supposing the mean duration of each pestilence to have been one year, the mean interval between the different pestilences would have been twenty-one years and one fifth.

From Jesus Christ to the year 1680, there were ninety-seven pestilences, the mean interval, upon a similar calculation of duration, being

seventeen years, or about one fifth shorter than in the preceding period.

Between 1006 of our era and 1630, fifty-two pestilences occurred, nearly all general, and several of them the most deadly on record. Their mean interval was twelve years.

The fourteenth century is the most remarkable in history for the confusion of states ; it is also the most calamitous. It was devastated by fourteen pestilences at least, and those most deadly, and nearly all universal. The mean interval between the different pestilences was six years—the shortest which has ever been observed.

The fifteenth and sixteenth centuries were traversed each by six pestilences, and the mean distance between them was sixteen years. Governments had again become vigorous, and it is on this account that pestilences were still rarer in the seventeenth century, the mean interval being twenty years.

France suffered perhaps more than the remainder of Europe during the middle ages. From A.D. 503 to 1039, this country was devastated, partially or generally, by no less than seventy pestilences, there being a mean interval between them of only six years and a half.

Returning to the tenth century, we find at this period the most frightful disturbances of governments and of society, as well as the greatest multiplication of diseases. The whole continent of civilised Europe was, as it were, submerged under an overwhelming deluge of strange and mortal evils, and so it continued to be until the sixteenth century: *Sensit et facies hominum novos omnique ævo priore incognitos non Italiæ modo, vero et universæ prope Europæ morbos*, as Pliny had said of another period. Erysipelas, St. Anthony's fire, the most deadly plagues or the most malignant fevers, scurvy, sweating sickness fatal dysentery, phthiriasis, plica Polonica, and the venereal disease, appeared everywhere, and committed long the most frightful ravages. Elephantiasis and every form of leprous affection spread in an astonishing manner; so much so, that almost all the towns in Europe had, in the thirteenth century, a leper hospital. In 1227, Louis VIII. of France left legacies to no less than two thousand lazaret-houses in his kingdom.

Erysipelas became common during this pestilential epoch, and was attributed to a humid

or marshy atmosphere, with a erude or fish diet. The affection often degenerated into various ehronic, sealy, pustular, or verminous forms of skin disease. "It was accompanied," writes Raymond, "with a thousand other sordid affections of the skin."¹

St. Anthony's fire (*feu infernal, mal des ardens*), a species of gangrenous erysipelas, broke out towards the end of the eleventh century, chiefly in France. It was principally observed under two forms. In the one, shivering and ehills were followed by redness, hardness, and diffused swelling of some portion of the body or extremities. The swollen parts subsequently became brown, livid, or violet-coloured; an eruption of petechial or miliary spots then occurred; delirium and *subsultus tendinum* supervened; and, finally, the parts originally attacked, or those exposed to pressure, mortified. In the other form the disease had some resemblance to plague or pestilential carbuncle. The initiatory symptoms were most severe in character, and about the third or fourth day some portion of the head, trunk, or extremities, was attacked with redness and hard swelling.

¹ Op. cit., p. 167.

There was a sensation of intense, burning heat in the affected part, and this quickly became livid, brown, black, and in the end gangrenous.

This malady resembled somewhat that caused by ergotized rye (*ergotism*), and like this latter affection, the *mal des ardens* is thought to have been chiefly occasioned by the use of diseased corn for food.

Both the gangrenous and simple erysipelas of the middle ages were liable to assume a chronic form, or to lead to certain persistent affections of the skin; and both maladies were so prevalent, that many hospitals were erected for the reception of patients suffering from them, particularly from the St. Anthony's fire. One of these hospitals existed in Marseilles before the twelfth century, and was known as the *hospitale eorum qui igne infernali laborare dicuntur*.¹

The pestilential development of *furuncular* or *glandular*, *petechial*, and *miliary fevers*, in the fourteenth and two succeeding centuries, need only be referred to briefly, as the history of these affections at that time has been made familiar to most readers

¹ Raymond, op. cit., p. 117.

by Dr. Hecker, in his work on the 'Epidemics of the Middle Ages.' The external signs observed in the 'Black Death' of the fourteenth century were those so well known as characteristic of the Oriental plague. At Constantinople great imposthumes appeared—buboes, no doubt,—on the thighs and arms of those affected, smaller boils on the arms, face, and other parts of the body, and in many cases black spots broke out all over the body, either single, or united and confluent. At Avignon there were observed buboes in the axilla and groin, and inflammatory boils over the whole body. At Florence the disease was marked by tumours in the groin and axilla, and similar tumours appeared indiscriminately in all parts of the body, as well as numerous black or blue spots.

Dr. John Quiney, in his account of the great plague of London in 1665, states, that all the cases "had at the beginning, or in the progress of this distemper, very painful buboes, situated commonly below the groin, sometimes in the groin or armpits, or in the parotid, or jugular glands; as likewise carbuncles, especially in the arms, legs, or thighs; and in all,

white, livid, black pustules, dispersed over all the surface of the body.”¹

Phthiriasis, or the pedicular disease, which was frequent during the middle ages, was characterised by the unhealthy skin becoming the home of parasitical insects. “These insects,” writes Virey, “found there an inexhaustible pasture, and they propagated with extreme rapidity under the skin, penetrating the cellular tissue, and establishing enormous colonies among the ulcers which they formed there.”²

The *plica Polonica* appeared in 1281, after the invasion of Poland by the Tartars. It first showed itself principally in eastern Poland, and subsequently extended throughout central Europe to the Low Countries. It was thought to be caused by the use of bad water and indigestible food, in a cold, humid, and unhealthy atmosphere. The disease was also considered to have some affinity with syphilis, scorbutus, and elephantiasis.

¹ ‘An Essay on the different causes of Pestilential Diseases.’ By John Quincy, M.D. 1721. p. 36.

² Amatus Lusitanus relates, that two slaves were constantly occupied in conveying to the sea in baskets the lice which appeared on the body of his master.

Syphilis, with its long array of secondary eruptions, appeared in a malignant form and swept over Europe in the fifteenth century.

Scurvy manifested itself in a hideous form in the sixteenth century, and became so prevalent that it was mistaken for a new disease.

Leprous affections (including tubercular leprosy, lepra properly so called, and the severer forms of psoriasis, and impetigo) attained a huge development during this pestilential epoch, as we have already seen.

Finally, it was during the same epoch that *smallpox*, *measles*, and probably also *scarlet fever*, obtained that pestilential impress which has hardly yet ceased to affect the ravages of these diseases.

The pestilential outbreak of *maculated fever*, which, following in the track of famine, culminated in Ireland in 1847, forms so painfully apt an illustration of the chief circumstances which characterised the pestilential outbreaks of the middle ages, that it will be instructive to glance for a moment at that eruption.

In 1845 (for we need not take up our story

at a more remote date), there was a general failure of the potato crop. The same year three forms of epizootic disease were very prevalent among cattle, the lung disease (pleuro-pneumonia), the hoof disease (the "pustular epizootic"), and the "typhoid epidemic." A fatal "distemper" also attacked pigs. The weather in spring was dry, in summer generally wet, and the moisture of June was unparalleled. Famine began to be felt among the labourers, who were generally housed in wretched and filthy hovels, which barely afforded protection from wind and rain. Scarlet fever, erysipelas, and smallpox, became frequent in several districts, and typhus broke out, the disease being marked by very early prostration of strength, insensibility, profuse petechiæ, and coma. A purpuric eruption, moreover, was a frequent concomitant of gastric fever, and also accompanied a manifestly scorbutic affection of the mouth and gums, which was common among young children.

Towards the close of the year, "Dr. O'Brien, of Naas, observed a peculiar fever in that locality, which he traced to the use of diseased potatoes. It was characterised by rose-coloured

patches upon the skin, 'a red, erysipelatous state of the face and scalp, with œdematous swelling of the eyelids,' and, in the majority of instances, it was attended with diarrhœa. This was the first indication of what subsequently appeared to be scurvy."¹

In 1846 the weather was inclement, the potato crop failed completely, famine spread over the island, and all the affections we have noted as becoming manifest in 1845 became aggravated, and almost universal.

In 1847 the potato crop failed extensively, and the evils brought about by the two preceding years of famine culminated. The distress was horrible. Starvation had, in several districts, paralysed the mental and physical energies of the people, and they appeared "stupefied, even to the level of the brute creation," and the dogs, "poor and piteous," had ceased to bark. Disease was in every hovel, and too often disease was accompanied by death. The culture of the land, in many places, was entirely neglected, and the face of the country reflected, in its utter desolation, the misery of the people. The epizootics al-

¹ 'Irish Census, 1851,' pt. v, vol. i, p. 264.

ready mentioned ravaged the herds, while maculated fever, pest-like, infected the whole land, along with the twin plagues, dysentery and diarrhœa. Smallpox assumed a graver character, and purpura and petechiæ were common to many affections. Scurvy became aggravated in frequency and intensity. "One of the most remarkable appearances in this disease was the swelling and darkened colour of the legs, which, in some cases, became 'tense and painful up to the knees, the surface being of a faint rose-red, but marked all over with blackish lines.'"¹

From the brief outline we have given of the great pestilential epoch of the middle ages, it may, we think, be gathered, that the causes which led to the inordinate development of chronic skin affections during the period, and those which brought about the frequently recurring pestilences, were closely linked together. That, in fact, there was an intimate bond of connexion between the causes of acute and chronic skin affections—a closer bond, indeed, than that which exists between their simple symptoms.

¹ 'Irish Census, 1851,' pt. v, vol. i, p. 297.

The gradual extinction or extreme infrequency of tubercular leprosy, and the greater rarity of the severer forms of chronic skin affections, in several countries of Europe, contemporaneously with an advancing husbandry, a more highly cultivated condition of the soil, and an improved condition of the people in every respect, is well worthy of note. In France and Great Britain no cases of tubercular leprosy appear to have been recorded since the terminal quarter of the last century. In 1775, the Leper Hospital at Waterford, in Ireland, contained one leper. "If," write the authors of the Irish Census Report on the Tables of Deaths, "we might speculate respecting one, at least, of the causes which have assisted to preserve from leprosy, scurvy, and other kindred diseases, a people not particularly remarkable for cleanliness, and not possessing the social and domestic comforts of others in an equal state of advancement, we would attribute it to the daily use of fresh vegetable food, such as the potato may be said to be, even at the most advanced period of the season."¹

It is also well worthy of note, that the de-

* 'Census, 1851,' pt. v, vol. i, p. 421.

clension in severity and frequency of the graver forms of chronic skin diseases in Europe, was contemporaneous with the great inter-pestilential interval between the last European outbreak of plague, and the first appearance of epidemic cholera. But, of late, tubercular leprosy (*spedalskhed*), and other severe chronic affections of the skin, as, for example, *radesyge*, have become extensively prevalent in Norway and adjoining countries—a fact of unusual interest when taken in connexion with a recurrence of true pestilential outbreaks of disease (*cholera*), and when compared with the mediæval history of epidemics. The authors, therefore, of the “Report on Tables of Death” in the Irish Census for 1851,¹ do not want justification for expressing the opinion, that it is quite possible that tubercular leprosy may appear again in the British Isles; and, although the approaches of the disease may be insidious, the effects may not be the less destructive.

We think, therefore, from these considerations, that it is probable there is an important interlacement between the causation of chronic and acute cutaneous affections—that there is

¹ Part v, vol. i, p. 426.

a natural as well as a symptomatological bond. The parallel which we have already indicated to exist between the affections which characterised the famine period that prevailed in Ireland, and which culminated in 1847, is completed, when we learn, that the deaths returned as occurring from lepra and other chronic skin diseases in that country amounted to seventeen in the decennium 1841, *but to 450 in the decennium ending 1851.*

If, then, we have read aright the history of acute and chronic skin affections, and it be such as we have attempted briefly to portray in the foregoing sections, one great practical conclusion, we think, arises out of that history ; to wit, *that the measures necessary for the prevention of both forms of affections are one and the same.* Thus, those great sanitary measures, by which we are now seeking either to ward off or to moderate the ravages of eruptive fevers and other deadly disorders, are those also to which it is requisite to have recourse, if we would seek to diminish the prevalence, or mitigate the intensity, of chronic skin diseases. Hence, the general preventive

medicine of the different forms of skin disease is similar, and consists in those means which would secure a pure atmosphere and just habit of body, by the better construction and selection of sites of dwellings ; by perfect drainage, and the due removal of filth, so as to obviate either dampness or miasmatic pollution of the air ; by the avoidance of overcrowding in apartments, and the securing of proper methods of ventilation ; by a rigid attention to personal cleanliness ; by the use of properly cooked food ; by due exercise ; and by shunning all intemperance, whether in food or in drink.

III. The great practical lesson which we learn from the history of skin diseases is not the less important because it may be said to apply almost equally to disease in general. It is a lesson which cannot be too often repeated, and which, as experience fully teaches, is most readily learned when it takes its legitimate place in the therapeutics of the different classes of disease. The value of the lesson will be more clearly appreciated as we proceed to glance at the chief questions connected with the causation of skin diseases.

1. Almost all the graver forms of chronic skin diseases have been attributed to one and the same series of causes, that is to say, an innutritious or unwholesome diet, together with residence in an unhealthy and particularly in a humid atmosphere. The extraordinary prevalence of these conditions from the tenth to the sixteenth century, doubtless gave rise to the unusual amount and severity of the chronic skin affections which then occurred.

Avicenna wrote of the leprosy which was endemic in the city of Alexandria : “ Et quando aggregatur caliditas aëris eum malitiâ eibi et ejus essentia ex genere piscium, et carne salitâ, et carne grossâ, et carnibus asinorum, et lenticulis, procul dubio est, ut eveniat lepra, sicut multiplicatur in Alexandriâ.”

This would seem to be the expression of the popular and long-standing belief of Eastern nations on the causation of the chronic skin diseases which have been termed leprosy. The Levitical law prohibits the use of pork, flesh-eating quadrupeds, predatory and aquatic birds, reptiles, and fishes which have neither scales nor fins. Plutarch, after commenting upon the excellence of these precepts, remarks that the Jews abstained from all seasoning drawn from

the sea, because they believed this to be harmful to man ; and they abhorred pork, because these barbarians thought that it caused impetigo and lepra. This aversion which the nations of remote antiquity had to the sea, Raymond thinks, had its source in the pernicious influences existing on marshy and polluted coasts.

The prohibition of the use of pork and fish among Eastern nations is wide-spread, on religious grounds, and may have had its source in the supposed effects of these articles of food in the production of obstinate skin affections. Plutarch tells us that the Syrians believed that the use of certain varieties of fish, as, for example, the anchovy, caused a leprous affection. Those who ate of these fishes were struck, as a punishment, by one of the goddesses, with a disease in which the thighs wasted, the body became covered with ulcers, and the hair perished. Menander states, also, that when the Syrians ate fish, the abdomen and the feet swelled ; and that in this state, clothed with a sack, the sick, lay upon the ground alongside the great roads, imploring the aid of the gods.

In our own days, the Arabians believe that tubercular leprosy is chiefly caused by an un-

wholesome diet, and particularly by the use of putrid fish. The natives of Malabar attribute leprous affections to the humidity of the coast climate, and a fish diet ; and in Sumatra, Java, and elsewhere in the Eastern Indies, where tubercular leprosy exists, the disease is attributed to similar causes. The Hindoo physicians hold that leprosy may be induced in the following manner:—

1. By drinking milk, after eating glutinous fish to excess.

2. By eating food which is of a windy nature.

3. By eating, when urged to it by great hunger, victuals of a disagreeable taste or odour.

4. By worms in the body.

5. By checking vomiting, and so retaining in the body what ought to have been ejected.

6. By habitual costiveness, by which means morbid humours are pent up.

7. By the formation of a morbid gastric (hypoehondriacal) humour and vitiated bile.

8. By a viscid, aerid humour in the blood.

Certain varieties of the disease are also thought to be produced by the bites of sundry.

insects of the beetle kind ; others, by the bites of snakes and venomous lizards.¹

The modern Greeks regard a fish diet as an excitant of tubercular leprosy. In Provence there exists an old proverb, which runs,—*Le poisson fait devenir ladre* ; and the vulgar Latin has it, that *Pisce sine vino venenum*.

In the Feroë Isles and Iceland leprosy is thought to be caused by the use of oily and rancid fish ; at St. Kilda, in 1684, the disease was attributed to the consumption of imperfectly preserved aquatic fowls.

Comparatively yesterday, the tubercular leprosy (*spedalskhed*) endemic in Norway has been made the subject of special investigation by the government of that country. It was ascertained that the disease chiefly affected the inhabitants of the coast, and that it especially haunted the bays ; also that it principally occurred among the most impoverished peasants, whose huts are usually built near the sea, in moist places. These dwellings consist for the most part of one contracted, low room only, in which the whole family live, and which has but

¹ Dr. Ainslie. 'Trans. of Royal Asiatic Society,' vol. i, p. 299.

one window, that cannot be opened. Farina-
 ceous matters, potatoes, badly prepared cheeses,
 the herring and other fishes, constitute nearly
 the sole food; flesh meat being rarely used,
 and when used, only that of animals which
 have been badly nourished. The clothing is
 not good, and the skin is excessively neglected.
 The affected, themselves, believe that humidity
 and cold, to which the peasantry are frequently
 exposed, are chief causes of the disease. Indeed,
 the poor can hardly keep dry, whether without
 or within their huts. The commissioners con-
 eluded, that where the comestibles were of the
 character referred to,—where the oxygenation
 of the blood would necessarily be incomplete,
 as in the in-door life of the peasantry,—where
 the humidity and cold were nearly permanent
 and influenced directly and as a rule, the
 capillary circulation,—it would doubtless follow
 that the definitive result would be an abnormal
 condition of the blood. They add,—“As we
 have demonstrated the presence of the dyscrasy,
 we also admit the causes we have named to
 be those, in general, which occasion *spe-
 dalskhed*.”¹

¹ “Traité de la Spedalskhed ou Elephantiasis des Grecs:

In Jamaiea, where the bulk of the ehief meal of the natives consists prinieipally of salt and often raneid fish, and where the huts are low, contracted, filthy, and over-crowded, and in wet weather very damp, leprosy is of frequent oecurrenee; and in the Mauritius, where some time ago leprosy was developed among the negroes, the disease, until they had been forced into slavery, had been unknown to them, and it disappeared when their diet had been improved by direetion of an order in eouncil.¹

The unanimity between the aneient and modern, popular and scientifie, opinions respecting the causes chiefly coneerned in the production of leprosy is certainly of great interest, and testifies in no small degree to the fixity of the eireumstanees which lead to the development of that disease.

'The influence of humidity as a eo-operating cause in generating leprous affeetions serves to explain the leprosy of the houses and eloths, mentioned in Leviteius, eh. xiii. and xiv. The

par D. C. Daniellssen et Willhelm Boeck.' Translated from the Norwegian, by L. A. Cosson (de Nogaret). Paris, 1848, p. 344.

¹ 'Edinburgh Monthly Journal,' August, 1841.

different-coloured *mould-spots* which formed upon damp clothes and within the houses during the great general plague of the sixth century, and, again, during the plagues of 786 and 959, as well as those which prevailed in the sixteenth century, were known as the house and clothes leprosy. In 1500 and 1503, this phenomenon, we are told by Hecker, "spread throughout Germany and France, and, from its great extent and long duration, may be reckoned among the most remarkable of its kind. The spots were of very different colours, principally red (*blood-spots*), but also white, yellow, grey, and black; and arose often, in a very short time, on the roofs of houses, on clothes, on the veils and neck-handkerchiefs of women, on various household utensils, on the meat in larders, &c."¹

¹ 'The Epidemics of the Middle Ages.' Sydenham Society's ed., p. 206.

"There is a graphic account from the pen of Miss Leslie, of the comforts they enjoyed during the winter in the capital of Portugal, in the year of civilization 1799. The family occupied half a floor in a four-storied house. The rain descended in torrents, with little interruption, for weeks together, and was driven in through the crevices of the ill-fitting window-frames. So excessive was the damp, that the shoes they took off over-night were often covered with blue mould in the morning. The clothes in the

If we turn now to the *pellagra* (rough skin), which is endemie in Lombardy and the Austurias, and which has been considered by some writers as a modified form of leprosy, we find that the affection, like leprosy, chiefly haunts wet and damp localities, and attacks individuals who, by their occupation, are most exposed to atmospheric and marshy influences, as for example, agricultural labourers, cultivators of rice-grounds, water-wardens, &c. The disease, moreover, affects principally the most impoverished members of the community, and those who live in confined, ill-ventilated, badly constructed dwellings, and, whose food consists mainly of Indian corn, the chief additions being a little salt fish from time to time, and vegetables fried in rancid oil. It has long been held by some, that the principal cause of the disease was the unvarying use of the Indian corn as food; but, more recently, it has been shown that the affection is determined by the use of this corn, when deteriorated by a fungoid disease, known as *verdet*. There is not wanting

bureau, the books on the table, nay, the table itself, all got mouldy.”—“*Recollections of Leslie*.”—‘*Quarterly*,’ April, 1860, p. 474.

strong probability in favour of this opinion. Pellagra is supposed to have occurred in the neighbourhood of Milan so far back as 1578, the term *pellarella* being at that time in use as a designation of a skin affection. The disease has been common in Lombardy since 1769.

The *plica Polonica* is also attributed principally to damp and foul dwellings, bad diet, and uncleanness of person.

If, now, we seek the causes of the graver forms of skin affection which are most commonly met with in ordinary practice, the graver forms of wheal (*acne*), of great pox (*ecthyma*), of rose (*erysipelas*), of boils (*furuncle*), of running tetter (*impetigo*), of itch (*scabies*), of seall (*porrigo*), of nettle-rash (*urticaria*), of limpet-shell seab (*rupia*), of sealy leprosy (*lepra*), of sealy tetter (*psoriasis*), of bleb fever (*pemphigus*), of itchy rash (*prurigo*), of purples (*purpura*), and of dandriff (*pityriasis*), we find that the most influential are a humid and unhealthy atmosphere and an innutritious and unwholesome diet; we find that these diseases are met with chiefly among the most impoverished classes—those who are exposed most to the vicissitudes of the weather, whose habitations are least

healthy, whose habits are least cleanly, and whose diet, at no times, perhaps, most nutritious, is liable to undergo serious fluctuations, as well in quantity as quality, by changes in the state of the market, and variations in the amount of paying labour.

Here, then, we note, that almost the whole of the more serious forms of chronic skin affection are attributable to a series of causes which is essentially one and the same; and the study of those affections which, like the tubercular leprosy of Norway and the pellagra of Lombardy, occur under comparatively fixed conditions, show us clearly the light in which these chronic affections should be regarded. They show us, indeed, *that the whole of the affections named are indications of a true physical deterioration.*

2. The influence of a serofulous or scorbutic constitution, in fostering or determining chronic affections of the skin, has often been discussed. Indeed, many of these affections have been regarded as forms of serofula or scurvy; and it is still a debated question with many, whether leprosy and pellagra are not to be looked upon as different manifestations of a like morbid

state of body. If what we have said upon the chief causes of chronic skin diseases, in the preceding section, be correct, it will be readily understood, that either scrofula or scurvy may be a concomitant, or the substratum, of any of the different forms of chronic skin affections as the causes of the two former maladies and the latter will often run side by side, or interlace the one with the other.

3. In the production of gangrenous erysipelas, and the maculated fever which so frequently accompanies famine, the causes of chronic and acute skin diseases approach very nearly together. If, indeed, we were to assume with Dr. Corrigan,¹ that the maculated fever of Ireland in 1847 was *directly* due to the famine which then prevailed in that island—that the famine and the fever had the relation of cause and effect—we might, perhaps, say with propriety, that the maculated fever and gangrenous erysipelas were acute forms of the cachectic conditions observed in the graver chronic forms

¹ 'On Famine and Fever, as Cause and Effect, in Ireland; with observations on Hospital Location and the Dispensation in Out-door Relief of Food and Medicine.' By D. J. Corrigan, M.D.

of skin diseases. Without, however, going thus far, it is undoubted that deprivation or scantiness of food has played a most influential part in determining the character of the acute affections named; and that both affections, being developed, were capable of propagating themselves by contagion.

Of other acute affections, characterised by cutaneous eruptions, we may trace the origin of *typhoid* fever to pollution of the system with the effluvia of human excretions; and of *typhus* fever to pollution with the products of the human respiration, in close, over-crowded places. It is not improbable that *plague* is an aggravated typhus. We are still foiled in determining with precision the mode of causation of small-pox, scarlet fever, and measles, except in so far as that they are produced by contagion. We know that a certain predisposition must exist before the specific poison will act, and that that predisposition may be brought about by atmospheric changes, by the respiration of an impure atmosphere, or by an insufficient or unwholesome diet. But it is doubted whether, at the present day, small-pox, or scarlet fever, or measles, are ever produced *de novo*.

The theory of contagion is supposed to meet all the requirements of the questions involved in the doubt. These questions, however, can only be answered by observation, and this has not yet sufficed to decide them satisfactorily. Our own experience would lead to the belief that measles and scarlet fever are not unfrequently developed anew, although we have not, as yet, been able to lay hold of anything which could be assumed to be a differential cause, in either disease, determining the outbreak of one or other affection from the predisposing causes common to both. We hesitate, moreover, to receive the theory respecting the propagation of small-pox as being conclusive.

4. In addition to the specific poisons developed during the progress of the acute skin affections just mentioned, and which are capable of reproducing themselves and their effects upon the integument, if transmitted to the system of another individual by inhalation or inoculation, there is another animal poison which exerts a most powerful influence in determining morbid conditions of the skin; to wit, *sypphilis*. The most constant sign of

inoculation of the system with this poison is a cutaneous eruption. It may be erythematous, scaly, papular, pustular, or tubercular. In short, almost all the severer forms of chronic skin affection may be determined by syphilitic inoculation; hence, one of the most important questions to be determined in the examination of a chronic cutaneous malady is, whether it be of syphilitic origin. It is believed by several authors of note, that all the leprous affections of the present day are of a syphilitic nature. On the other hand, syphilis has been regarded a modification of the middle-age leprosy.

5. Several forms of skin affection are liable to be excited by a disordered condition of the digestive organs, brought about by indigestible or over-stimulating food. From this source arise certain varieties of erythematous, vesicular, and papular eruptions, as nettle-rash, shingles, tooth-rash, &c.

6. Finally, the direct action of certain agents upon the skin may give rise to sundry cutaneous affections. Thus, excessive solar heat is apt to occasion an irritating papular or vesicular erup-

tion; and the frequent handling of sugar by grocers not unfrequently excites a sealy tetter (psoriasis) of the palm.

The practical conclusion with which we terminated our brief outline of the general history of skin diseases in Europe, and which seemed to flow naturally from that history, will be seen, then, to be fully confirmed by a closer examination of the causes inducing these maladies. The preventive medicine of chronic and acute diseases of the skin is one and the same; but not so the curative.

In those acute affections which, like the eruptive forms, as for example, small-pox or measles, in which the malady runs a definite course, the object of the medical man is to place his patient in the best position for running through that course with safety to life. No remedies are known which might check or destroy the morbid process after it has once commenced; but, in the course of that process, many incidental circumstances may arise which, if not foreseen and met, might terminate life. It has been often and truly remarked, that in these cases the physician has the same relation

to his patient that the helmsman has to the course of a ship. The comparison is an apt one ; and it is only by constant and unflagging watchfulness and by training the hand and eye at the bedside, that that tact can be obtained, which enables a practitioner successfully to steer his patients amidst the many rocks and shallows which beset the progress of the eruptive fevers.

Very different, although not less difficult, is the position of the medical man with regard to chronic or sub-acute cases of skin diseases. In these, a true curative treatment is commonly required ; and our success in conducting it will depend almost entirely upon our ability to trace the affection to its source. Hence the importance of clearly apprehending the different classes of causes which may act in the production of these affections. Now this apprehension is, we think, best derived from a comparative study of these causes, as we have briefly attempted to set it forth. Furnished with the light derived from the examination of what may be termed *glaring instances* of causation, we approach with more confidence those difficult cases which often occur in practice, in which the origin of

the disease is masked by the co-operation of one or more of the series of causes we have described. Having always in mind the principal agencies which are in operation in the production of skin affections, and the mode in which these agencies act, when confronted with a complex case, we can probe our way carefully from point to point, at each step throwing light upon the probable origin and progress of the case, and the right method of treating it.

With these preliminary remarks, we shall now proceed to the systematic description of the different forms of skin disease, premising that skin diseases include not only maladies of the skin properly so called, but also maladies of the hair and nails—for the hair and nails may both be looked upon as modifications of the outer layer of the skin. Hence the primary division of our subject may be into—

1. DISEASES OF THE SKIN.
2. DISEASES OF THE HAIR.
3. DISEASES OF THE NAILS.

B O O K I.

DISEASES OF THE SKIN.

DISEASES OF THE SKIN.

CHAPTER I.

OF the many classifications which have been proposed for simplifying the study of skin diseases, that of Willan is the one which, upon the whole, still presents the greater number of advantages. This classification has, no doubt, many faults. It groups together disorders which are widely apart in their essential characters; it separates other disorders which are closely akin. If carried out strictly, indeed, it would often separate mere phases of the same disorder. But it is practical and plain in an eminent degree, and taken for what is here chiefly wanted—as a means, that is, by which one skin disease may be readily distinguished from another—it is, in its main features, without any worthy rival.

Skin diseases are arranged by Willan under eight orders—*exanthemata*, or rashes; *papulæ*, or pimples; *vesiculæ*, or vesicles; *bullæ*, or blebs; *pustulæ*, or pustules; *squamæ*, or scales; *tuberculæ*, or tubercles; *maculæ*, or spots; and, under these orders, with some transpositions, they may still be arranged conveniently.

1. The *exanthemata*, or rashes, are characterised by redness, disappearing or diminishing on pressure, returning when the pressure is removed, and ending in desquamation or peeling off of the scarf-skin. Under this group are ranged *crysipelas*, *erythema* (common rash), *urticaria* (nettle-rash), *scarlatina* (scarlet fever), *rubeola* (measles), *roseola* (rose-rash), the mulberry-rash of typhus fever, and the rose-rash of typhoid fever: and here may be conveniently placed, as Willan placed it, *purpura*—for *petechia* and *vibices* (forms of purpura) are not very remotely allied to the mulberry rash of typhus fever.

2. *Papulæ*, or pimples, are small, solid, acuminate elevations of the skin, not obliterated under pressure, varying in colour, from white to red, and ending, commonly in scurf, occasionally in superficial ulceration. Under

this head are lichen (sun-rash, &c.), and prurigo (itchy rash).

3. *Vesiculæ, or vesicles*, are small, circumscribed elevations of the scarf-skin, containing serum, at first (both in their coats and contents) transparent, afterwards white and opaque, and terminating in the formation of scurf or thin scales. Under this head are ranged varicella (chicken-pox), sudamina, eczema (red fret), herpes (fret), scabies (itch).

4. *Bullæ, or blebs*, differ from vesicles chiefly in size, this being sometimes as large as the egg of a pigeon, or even hen, and in being followed by marked ulcerations and crusts. They agree with vesicles in that their coats and contents are at first transparent or translucent, and afterwards opaque. Here belong pemphigus (bleb fever), and rupia (limpet-shell scab).

5. *Pustulæ, or pustules*, are small, circumscribed elevations of the scarf-skin, containing pus from a very early period, depending upon a somewhat deep-seated inflammation of the subjacent true skin, and followed by marked crusts. When vesicles become opaque, pus may be present in them; but, except irritated, the inflammation connected with this

form of eruption is not sufficient to produce pus, or at any rate, not to produce pus at an early period. Under the group of pustules are variola (small-pox), vaccinia (cow-pox), impetigo (running tetter), eethyma (great pox).

6. *Squamæ, or scales*, are formed, wholly or in part, by morbidly altered searf-skin, the scales varying from simple loose seurf to hard, thick, firmly fixed scales or plates. In this group are psoriasis (sealy tetter), lepra (sealy leprosy), pityriasis (dandriff), pellagra (Lombard evil), ichthyosis (fish-skin disease), perhaps xeroderma (dry skin), and elephantiasis Arabum (Barbadoes leprosy).

7. *Tuberculæ, or tubercles*, are indolent, solid elevations of the skin, larger than pimples, smaller than tumours, and generally ending in suppuration and ulceration. Here belong molluscum, lupus (wolf), cheloidea (tortoise-shell skin), lepra tuberculosa (tubercular leprosy), and its varieties, Spedalskhed, lepra Astrachanica, malum Alepporum. Here also may be placed, more conveniently than elsewhere, furunculus (boil), carbuncle, pustula maligna (malignant pustule), pestis glandulosa (plague), and equinia glandulosa (glanders).

5. *Maculæ, or stains*, are of various colours, light or dark, and various sizes, many of them permanent, or disappearing very slowly. Here belong lentigo (freckles), ephelis (sun-burn), nigrities (black skin), including Addison's disease), albinismus (albino-skin), nævi (moles) of certain kinds, nitrate of silver stains, and chromidrosis (coloured sweat).

These different forms of skin diseases, however, instead of being as distinct as any system of classification would represent them to be, interblend on all hands. Of this sufficient proof will appear as we proceed. They are also modified under particular circumstances, and especially by the action of the *syphilitic poison*. Indeed, the influence of this poison is so great in modifying the character, or determining the appearance, of cutaneous eruptions, that it is usual to consider its effects apart; and to this custom we shall adhere, addressing ourselves to the examination of the *syphilidæ*, after we have passed in review the different groups which have been named.

CHAPTER II.

EXANTHEMATA.

THE exanthemata, or rashes, are characterised by redness, disappearing on pressure, returning when the pressure is removed, and ending in desquamation or peeling off of the scurf-skin. The individual diseases are—

Erysipelas.

Erythema.

Urticaria.

Searlatina.

Rubeola.

Roseola.

The mulberry-rash of typhus fever.

The rose-rash of typhoid fever.

Purpura.

The last-named affection does not agree with the definition in the colour disappearing on pressure, and returning, when the pressure is removed; but Willan placed it under exan-

themata, and no more convenient place can be found for it.

1. ERYSIPELAS.

SYN. Rose. *Fr.* Erysipèle. *Germ.* Rothlauf.

In erysipelas the skin is red, hot, swollen, and painful, and these indications of cutaneous inflammation are preceded and accompanied by fever. After certain symptoms of fever—rigors, depression, followed by quick pulse, thirst, hot, dry surface, and so on—a portion of skin quickly becomes red, hot, swollen, and painful. The colour varies from bright red to livid red; it disappears under the pressure of the finger, but returns immediately. The pain is smarting or sealding, not violent. For three or four days these inflammatory and febrile symptoms increase in severity, and then they begin to decline; the local and constitutional symptoms generally keep pace in both directions. When the local disease is at its height the scarf-skin is often raised into blisters of various sizes, by the effusion under it of yellowish serum. During convalescence, the same scarf-skin detaches itself in shreds of

various sizes. Where, as is usually the case, the face and head are affected, headache, restlessness, delirium, and other symptoms of nervous disturbance, are added to those of general fever. In some cases the local inflammation subsides and disappears altogether, or is transferred to some internal organs.

Sometimes the local inflammation runs very high, extends to the deeper layers of cellular tissue, as to those deep down among the muscles, and, instead of ending in resolution, ends in suppuration. In this case the pain becomes pulsating on the fifth or sixth day, the swelling acquires a doughy feel, and extensive abscesses, the matter mixed with shreds of mortified cellular tissue, are pretty sure to form with great rapidity. In this case the fever is generally very intense—so intense as sometimes to be fatal of itself. This variety of erysipelas is designated *E. phlegmonodes*.

Sometimes the local and general symptoms indicate great want of power, being typhoid or putrid, instead of inflammatory. In this variety, which is called *E. gangrenosum*, vesicles filled with sanguinolent or sanious fluid are apt to make their appearance very soon, and the

inflamed skin is very liable to become gangrenous.

Erysipelas, in some forms at least, is certainly contagious. This is often proved very sadly in hospitals, particularly in lying-in-hospitals; indeed, one of the worst forms of fever affecting lying-in-woman is intimately allied to erysipelas, and instances are unhappily too common in which the accoucheur has carried the contagion of this form of puerperal fever from a case of erysipelas. It often happens, also, that persons suffering under unhealed wounds have been inoculated with the contagion of erysipelas from a woman suffering from this form of puerperal fever. Before erysipelas can be thus transmitted, however, there must be a previous state of ill health—a state not remotely analogous to that in which typhus begins, and arising also very often in the same circumstances as typhus.

Under ordinary circumstances, the danger of erysipelas is in proportion to the extent of the disease, and the typhoid complexion of the local and constitutional disturbance. The state of the brain and its membranes is always a source of anxiety where the scalp is the part

affected: a typhoid state appears to be the grand danger where contagion is obviously the cause; the actual severity of the fever may prove fatal in the phlegmonous variety. There is danger, in some cases, even after the acute stage of the complaint is over; among others, there is danger of the patient dying exhausted from the excessive discharge from abscesses left by the erysipelas.

The treatment of erysipelas must depend upon the active or passive complexion of the symptoms. At present very little activity is met with in these symptoms, and we shall very rarely have to have recourse to depressing measures, such as bleeding, purging, and so on. If there be an exception, it must be in the case of *E. phlegmonodes*. Even salines will scarcely be necessary in the ordinary run of cases. Wine, beef-tea, and other appropriate nourishment, quinine, the tincture of the sesquichloride of iron, are much more likely to be necessary, particularly the latter. This latter remedy was introduced some five or six years ago by Mr. Bell, of Edinburgh, and of the advantageous results of this practice in very many cases there is now abundant proof.

So satisfied are we, indeed, upon this point, that there are very few cases in which we should not be disposed to trust to it. The dose for an adult is half a dram in a little water, or infusion of quassia.

Where the head is affected, it is of primary importance to keep the part high by using several pillows, and, at the same time, to keep the legs warm, or rather hot, by flannels dredged with dry mustard powder or pepper, or in some other way.

The local treatment is of great importance and of great variety. The well-known plan, recommended first by Mr. Higginbottom, of Nottingham, of applying a strong solution of lunar caustic¹ over the inflamed part, is most valuable. The effect of the solution is marvellous at times, not only in quelling inflammation in the part, but also in preventing its spread to other parts. Indeed, it very rarely happens that the erysipelas will overstep the black eordon which is often made round an erysipelatous portion of skin with a stick of lunar

¹ The strength of the solution used by Mr. Higginbottom is Nitrate of Silver ℥viii, Nitric Acid ℥xij, Water ℥j.

caustic. Another most effective part of local treatment is to paint the inflamed surface with layers of a varnish consisting of collodion and castor-oil. This plan is of newer date than the one mentioned immediately before, and some are disposed to look upon it as more effectual. Other plans, not without their value, but of less utility than the two just mentioned, are to cover the inflamed part with cotton wool, to smear it with a covering of lard or simple ointment, or to dredge it over with a thick coating of flour. It is of great moment to exclude the air from the inflamed part, for the air serves to keep up the inflammation; and several of these plans act beneficially, chiefly by excluding the air.

Formerly it was much the habit to have recourse to fomentations, and other wet kinds of application; but these are now wisely set aside for one or other of those which have been mentioned. At one time, also, it was a not very uncommon practice to endeavour to relieve the tension by puncturing the part; and more lately the application of ice, carried often to congelation, as recommended by Dr. James Arnott, has been strongly recommended; but,

as a rule, nitrate of silver and collodion varnish, one or both, will be found to do what is necessary, particularly if we have been careful not to depress the patient, and to give the tincture of the sesquichloride of iron from the beginning.

If abscesses have formed, these must be treated on ordinary principles—poulticed, dressed with water-dressings or ointment, opened at the proper time, and so on.

2. ERYTHEMA.

SYN. Common Rash. *Fr.* Efflorescence cutanée. *Ger.* Die Rothe, Hautröthe.

Erythema is characterised by patches of superficial redness, of no definite form, size, or locality, with little or no swelling or smarting, and with little or no constitutional febrile disturbance.

Many varieties are described: among them, *E. intertrigo*, *E. læve*, *E. fugax*, *E. papulatum*, *E. nodosum*.

E. intertrigo, as the qualifying name implies (*intertrigo*, a galling), is simply the galled or excoriated state of skin produced by various causes—by friction between adjoining folds of

skin in fat people, by friction against a saddle, by the irritation of acrimonious discharges, and so on. *E. læve* is the form met with in cases where the skin is over-distended, as in dropsy. *E. fugax* is characterised by its fugitiveness. It affects, by preference, the upper part of the body, beginning in the arms, and shifting successively to the neck, breast, and face. It is often symptomatic of some disorder in the stomach or bowels, produced by particular articles of food or medicine, as shell-fish or copiba: not unfrequently, it may attend upon teething. *E. papulatum* is erythema with an unusually rough or pimpled state of skin. It is erythema blending in a papulous or pimply disorder—lichen, or prurigo. *E. nodosum*, the most noteworthy variety, occurs in oval blotches, which slowly rise into hard or painful protuberances, and which, after continuing for a week or ten days, gradually subside without suppurating. These blotches are almost invariably met with upon the fore part of the legs of weakly females. Erythema sometimes occurs in an epidemic form, as in Paris in 1828 and 1829; and, in this case, there may be marked derangement of the

stomach and bowels, considerable fever, and extensive peeling off of the scarf-skin afterwards.

The line of distinction between erythema and erysipelas is not always very easily defined. Sometimes it would seem to be undistinguishable, as in *erythema nodosum*. Under ordinary circumstances, however, the serious fever, the tumefaction of the inflamed parts, the burning pains, the vesications on the surface, the marked disposition to spread, the predilection for the head and neck, are sufficiently characteristic of erysipelas. The distinctions between erythema and other exanthemata, with which, in some instances, it may possibly be confounded, as roseola, measles, or scarlatina, will be more conveniently considered afterwards; and so also will the distinctions between *É. papulatum* and urticaria and lichen.

Usually erythema is an altogether trivial affection; but it must not be forgotten that very serious diseases, as tuberculous leprosy and pellagra, often begin in an erythematous condition of the skin.

The treatment of this exanthem is a very simple matter. Where it depends upon the irritation of any special article of food or

medicine, all that is wanted, in all probability, is to discontinue the use, and to dislodge what happens to remain in the stomach or bowels, by an emetic or aperient, one or both. Where it is in the legs, particularly if it have the form of *E. nodosum*, rest in the recumbent posture for a while will probably be necessary, and tonics of one kind or other. Dr. Watson speaks highly of quinine in the variety last named, and we have seen more than one case in which no good was done until this medicine was given. We have also seen one case in which the tincture of the sesquichloride of steel, in half-dram doses, seemed to act more kindly and more quickly than the quinine. Locally, the great thing seems to be to exclude the action of the air by the collodion varnish. Lotions containing tannin are highly spoken of as local applications, but we prefer a dry powder, as violet powder, to these, and the varnish to the powder.

3. URTICARIA.

SYN. Nettle-rash. *Fr.* Urticarie. *Germ.* Brennesselschlag.

The eruption of urticaria, as the name implies, is like that which is produced by the

sting of nettles. It is characterised by dull, white, prominent wheals, of no regular size or shape, for the most part edged with red, and attended by sharp local sensations of stinging and burning, and by some small degree of febrile disturbance.

Nettle-rash is conveniently divided into an acute form and a chronic form. The acute form, which is generally caused by some error of diet, is also the commonest. Three or four hours after swallowing the obnoxious substance, after being depressed, sick, perhaps purged, the patient becomes hot, feverish, and covered with rash: twenty-four hours later, and the rash disappears as quickly as it appeared. The rapid appearance of the rash, the rapid spreading over the greater part of the body, and the rapid disappearance, are very marked features in urticaria. Chronic urticaria is very indefinite in its duration. It may go on appearing and disappearing in the most irregular manner for months. In its slightest form, it is called *U. evanida*: in its severest form *U. tuberosa*—so called, because the subcutaneous cellular tissue is more implicated than usual. In some cases the skin is remarkably susceptible,

and an eruption having all the general character of nettle-rash may be produced at any time by friction. We saw a patient some time ago, whose case is described by Dr. Gull, in a recent number of the Guy's Hospital Reports, in whom, on writing (1859) with the nail of the forefinger upon the skin of the forearm, the figures immediately became embossed, as in nettle-rash. This variety is called by Dr. Gull *factitious urticaria*.

Nettle-rash is distinguished from erythema by the dull-white prominent wheals, edged with red, by the disagreeable tinglings and stings of the eruption, and by its speedy evanescence. *U. tuberosa* is not unlike *erythema nodosum* at first sight, but its course is quite different; for, instead of being obstinate and persistent, like the latter affection, it is usually of short duration and intermittent. The sharp tinglings and stings of urticaria, are also absent in erythema. *U. tuberosa* may also be confounded, in some instances, with *lichen urticatus*; but here again the distinction is sufficiently marked, as we shall see when speaking of lichen.

Where the rash is caused by any error in diet, in addition to leaving off the offending

article, it may be necessary to begin treatment with emetics and purgatives. After this, any febrile symptoms must be treated by ordinary means, hydrocyanic acid being often a very serviceable addition for quieting the distressing irritation in the skin. In obstinate cases, a vegetable diet for a time, and a rigid abstinence from alcoholic drinks, spices, and condiments, may be necessary; and, according to the state of the system, quinine, arsenic, iodine, &c., may be of use as medicine. Local measures do not seem to do much good. In some instances, prolonged baths, at a temperature regulated by the feelings of the patient, are of considerable service. We have never had an opportunity of trying it, but it is not unlikely that acetonite will prove to be a most valuable remedy in relieving the tinglings and stings which are the most prominent symptoms in urticaria.

4. SCARLATINA.

SYN. Scarlet fever. *Fr.* Scarlatine. *Germ.* Scharlachfieber.

Scarlatina is a contagious fever, rarely occurring more than once in the same person, and

marked by an active state of superficial inflammation in the skin and in certain portions of the mucous membrane, especially in that of the throat. The typical rash consists of large, irregular, diffused patches, the colour of which is generally likened to that of boiled lobster.

The simple form of the disease (*S. simplex*) is ushered in by the usual symptoms of fever, and usually by sore throat. The rash begins to come out on the second day, and continues to come out during the third and fourth days; it remains out for four days; and in three days more the scurf-skin is peeling off in scurf-scales, or large flakes. The rash comes out on the face, neck, and breast on the second day after the beginning of the fever; on the third day it spreads over the trunk and upper extremities; on the fourth day it extends to the lower extremities: it declines in the same order, in the face first, in the feet last, in each place remaining out four days before declining. The skin, unusually hot from the beginning, is hottest on the evenings of the third and fourth days from the commencement of the eruption, the temperature often rising when at its highest

to 104° Fahr., and sometimes, as in a case mentioned by Heberden, to 114° Fahr.; and accompanying this heat, is a considerable degree of swelling and itching. The eruption is more continuous on the face, neck, and limbs, more in patches on the trunk; the colour is always brighter and more vivid upon the loins and nates and flexures of the joints than elsewhere. The colour is also brighter and more vivid in the evenings than in the morning, and especially in the evening of the third and fourth day. In some cases, where the inflammation in the skin runs higher than usual, the ordinary rash is accompanied by sudamina, or minute vesicles filled with clear fluid, of which we shall have to say more afterwards.

One of the first symptoms of scarlet fever—one almost invariably preceding the rash—is sore throat, with some stiffness in the jaws and neck; and, on looking into the mouth, the tonsils, velum, palate, and fauces are seen to be red and swollen. This red and swollen state is very soon followed by an aphthous condition, or by an ulcerated state, which shows a disposition to take on a sloughy state. The lining membrane of the tongue participates

also in the inflammation which overspreads the lining membrane of the back part of the mouth, and the appearances resulting are very characteristic. At the onset the tongue is covered with a cream-like fur, and through this fur the projecting tips of the enlarged papillæ project as red points; at a later period the white fur clears away, and the tongue is left red, roughened by the projecting papillæ, and not unlike a strawberry in appearance.

The inflammation of the mucous membrane of the mouth and throat, and that of the skin, appear to be inversely related to each other, the mouth and throat being comparatively uninfamed if the rash comes out freely, and *vice versâ*. There is, however, some direct connexion; for in the simple form of the disease, the affection of the throat usually declines *pari passu* with that of the skin.

In scarlet fever, however, even in its simplest form, the risks do not end with the disappearance of the rash, sore throat, and fever. There is, indeed, a special and peculiar after-risk, which is almost greater than that of the disease itself; and this is that of dropsy. This state is most likely to show itself when the scarf-

skin is peeling off, and when the skin is tender and sensitive; it depends upon a congested or somewhat inflamed condition of the kidney; it arises most generally from premature exposure of the skin to cold; it may happen after slight as well as after severer cases—after slight, perhaps, rather than after severer cases; for in these slighter cases less care is taken to avoid exposure. Preceding these dropsical symptoms are signs which point to the kidney as the source of the mischief; for the urine, if examined, will be found to be scanty, albuminous, bloody, or containing cells or casts which have been cast off from diseased renal tubules. This condition of the kidney is usually of a very obscure character; the accompanying condition is often the very opposite of fever—paleness, weakness, exhaustion; and the puffiness of the skin, which is the beginning of the dropsy, may be the first sign of its existence, if the condition of the urine is not carefully attended to. As the disease in the kidney progresses, and the natural secretion of urine fails, fluid escapes from the overloaded vessels, the various cavities of the body become waterlogged; and, partly from the pres-

sure of the dropsical effusion, and partly from matters being retained in the blood which ought to be excreted, at length drowsiness, dyspnœa, convulsions, may make their appearance, and prepare the way for a fatal issue.

In other cases, scarlet fever may leave the patient strongly disposed to rheumatism in the joints: in any case it leaves a state of ill health, which is very slow to pass off. In particular, scarlet fever is to be dreaded where there is a latent disposition to serofula; for any latent disposition of this kind is pretty sure to become sufficiently patent under these circumstances.

Very often, as in *S. anginosa* and *S. maligna*, the affection of the throat predominates greatly over the rash, and in other very important respects the symptoms differ from those which belong to the simpler form of the malady, *S. simplex*.

In *S. anginosa*, the prominent symptoms are inflammatory sore throat and active fever. The rash is always deferred, often until the end of the third day; it is, at most, only in scattered patches, and these are not much disposed to remain out the proper time of four

days. Headache, delirium, coma, and other head-symptoms, are apt to arise, partly from the severity of the fever, partly from the obstruction to the circulation in the head arising from the inflamed and swollen state of the throat and neck. In *scarlatina maligna*, the prominent symptoms are putrid sore throat and putrid constitutional symptoms. The throat passes rapidly into a sloughy state, and the putrid character of the local and general symptoms is kept up and aggravated by the absorption of the acrimonious and poisonous discharges thence arising. The eruption, if present at all, is confined to a few dull patches, which are late in appearing, and apt to disappear speedily, and which are not uniformly mixed with ptechiæ: in the worst forms, death may happen from typhoid prostration, before there is time for any eruption to make its appearance.

In some instances there may be a moderate degree of sore throat, and a moderate degree of fever, *without rash*. This is *S. sine exanthemate*. At any rate, there is some reason to believe that the febrile sore throat, which is not uncommon at times when scarlet fever is about, is capable of communicating

scarlet fever in its ordinary form, as well as a sore throat like itself, and is often followed by kidney disorder.

The only disease with which scarlet fever is likely to be confounded is measles; and here, as we shall see when speaking of measles, the distinctions under ordinary circumstances are sufficiently marked.

The contagiousness of scarlet fever is not to be doubted, and it is tolerably certain that articles of furniture and clothing, as well as the actual patient, may be the means of transmitting the disease. Dr. Watson mentions a striking instance in illustration, which ought to be generally known:—"Scarlet fever had attacked several persons in a large household. When it was fairly over, the house was left empty, and then (as was supposed) was thoroughly ventilated and purified. A year afterwards the family returned to the house. A drawer in one of the bed-rooms resisted for some time the attempts to pull it open. It was found that a strip of flannel had got between the drawer and its frame, and had made the drawer stick. The piece of flannel the housemaid put playfully round her neck. An old nurse, who

was present, recognising it as having been used for an application to the throat of one of the former subjects of scarlet fever, snatched it from her, and instantly burned it in the fire. The girl, however, soon sickened, and the disease ran a second time through the household, affecting those who had not had it on the first occasion."

In the treatment of the simple form of scarlet fever, confinement in a well-ventilated room, a sparing and unstimulating diet, sponging with cold or tepid water, or vinegar and water, and some acidulated drink, will be all that is necessary during the febrile state; and, afterwards, the great thing will be to prevent the perspiration from being checked, by wearing flannel next the skin, and by other common-sense measures; for by keeping up free action in the skin, we shall best secure the patient from the risk of secondary mischief in the kidney.

The treatment of the graver forms of scarlet fever, and of the dropsy so often arising from this fever in any form, is not so easily disposed of.

There is certainly, at present, a strong tendency to have recourse to a treatment which

partakes more or less of a tonic character, and, so far as we have had an opportunity of judging, the practical results are highly satisfactory. After the previous exhibition of an emetic and purgative, a recent writer on the subject, Mr. Hood, regards quinine as the sheet-anchor of successful practice. Mr. Hood tells us, in his preface, that he has only lost two patients from scarlet fever in twenty-five years of active practice; and that his friend, Mr. Fuller, of Piccadilly, who has followed a similar mode of treatment, has not lost a single patient from this complaint during thirty years. Another recent writer, Mr. Meade, of Bradford, recommends the tincture of the sesquichloride of iron, in doses varying from five to fifteen minims, according to the age of the patient; and he prefers this medicine to quinine, after giving both an extensive trial in a prolonged epidemic. He was led to try steel in this form from the beneficial results attending its use in erysipelas, and his expectations, he tells us, have been more than answered.

Dr. Watson recommends the use of a drink (in this following the practice of Dr. Hunt) of chlorate of potash, consisting of one drachm

of the salt in a pint of water, from one pint to a pint and a half being taken in the course of the day. This drink is recommended especially where there is a typhoid state, or a disposition to this state, and it is undoubtedly of great value; but it is not yet determined whether, even in a typhoid condition, it is as serviceable as the quinine or tincture of steel.

There is also, at present, a marked disposition to have recourse, at an earlier period, to nourishment and wine; and it is, no doubt, better to err on the side of stimulating than on that of depressing; but it must not be forgotten, that the imprudent use of stimulants may serve not a little to develope the mischief in the kidney, which is the great danger to be avoided. In the typhoid or putrid form of the disease, wine is the sheet-anchor almost from the very first day of the disease.

The mischief in the throat is often very unmanageable under any plan of treatment. There can be no doubt, however, that nitrate of silver, in a solid or fluid form, is a local application of great value, externally as well as internally; and also that much good may follow, in cases where the throat is in a sloughy

state, from the use of a gargle containing ehlorine, or from syringing the throat when a gargle cannot be used. The effect of this ehlorinated solution, which may be formed by adding a suffieient quantity of water to the common ehlorinated solution of soda, is to disinfect some of the sloughy matters, and so lessen the risk of the system being reinoeculated.

As local applications to the skin, cold or tepid spongings with water, or vinegar and water, are very grateful, and probably all that will be necessary under ordinary eircumstances. If the rash shows a disposition to reeede, hot spongings or bathings may be necessary. It has been reeommended to smear the skin over with lard, and the plan is said to answer. It is quite intelligible, indeed, that the exelusion of air from the skin will lessen the inflammation in the skin, and make the patient more eomfortable; but the dirtiness of the plan will always be an objeetion to it, which will overrule any advantages which it may possess.

Notieing the faet that belladonna produeed a rash in some respects like that of scarlet fever, Hahnemann, on the principle of "*similia similibus curantur*," reeommended this drug both

as preventive and curative in scarlet fever ; but, except in homœopathic quarters, this plan is now very generally allowed to be of no value, or, at any rate, of most doubtful value.

5. RUBEOLA.

SYN. Measles. *Fr.* Rougeole. *Germ.* Masern.

The rash of rubeola consists of numberless minute raspberry-red pimples, aggregated in small, erecentic, and annular patches, somewhat raised above the surface, and with intervening spaces of unaltered skin. As Mr. E. Wilson points out, the mottled aspect of the skin of children in health, and exposed to cold, in its erecentic and annular tracery, is very like the mottled aspect of the skin in measles.

Rubeola begins with fever and catarrh—rigors and lassitude, followed by heat of skin, quick pulse, thirst, loss of appetite, nausea, red and watery eyes, coryza or copious defluxion from the nostrils, sneezing, hoarseness, harsh cough, and so on ; and these symptoms increase for four days. The rash, as a rule, comes out on the fourth day, but it is often later. It begins

on the face and neck ; during the next two or three days, it extends in order and progressively, to the trunk, arms, and legs ; it stands out for three days, and then it declines in the same order as that in which it appeared, first in the face, last in the legs ; the colour becoming browner as the rash fades, and the end being in the peeling off of the scurf-skin in dry, fine scurf. In some instances, numerous miliary vesicles are intermingled with the ordinary rash. The catarrhal symptoms do not usually subside when the rash makes its appearance on the face, but they rather tend to increase for the next three or four days. They rather tend to increase, for during this time a rash-like condition, similar to that which is over-spreading the skin, is being developed upon the mucous membrane of the mouth, throat, nose, and air-passages generally. Usually, the catarrhal symptoms decline contemporaneously with the decline of the rash on the face ; but there is a tendency to continue longer, and to merge into a more serious sort of pulmonary mischief, if the rash on the skin has been checked by cold or in any other way ; and this tendency is that in which measles be-

comes dangerous. When the catarrhal symptoms and the rash disappear, it is a common thing for diarrhœa to make its appearance, and to continue for several days; and this state, under ordinary circumstances, must be looked upon as a sort of safety-valve by which the lungs are in some degree relieved from danger; but in some epidemics, where the symptoms of the disease are of a typhoid or putrid character, this state of diarrhœa may itself be a source of danger, in that it may tend not a little to increase the exhaustion.

Recovery after measles is always slow, and often imperfect. If there be a disposition to serofula, it is very likely to be developed; and at best, a state of ill health remains for some time, in which every exposure to cold or other imprudence is apt to issue in inflammation of the lungs or exhaustive diarrhœa. The skin, moreover, is for some time subject to various eruptions, boils, &c.

The rash of measles may be present without catarrhal symptoms, as in *R. sine catarrho*; or the catarrhal symptoms may be present with little or no rash, as in *R. sine exanthemate*; or typhoid symptoms may predominate, and the

rash be of a livid complexion, as in *R. nigra* ; but, as a rule, measles present no varieties which require special attention.

Measles is more contagious than scarlet-fever, and more likely to occur a second time in the same individual. Where there are no catarrhal symptoms, as in *R. sine catarrho*, there is little or no protection against a second attack. Measles may be communicated, though with some difficulty, by inoculating with the blood, with the fluid contained in miliary vesicles when these happen to be present, or with the mucous discharge from the nostrils or lungs ; but the disease is not rendered milder by this means. The ordinary period of incubation, between the reception of the contagion and the outburst of the disease, appears to be about fourteen days.

The diagnosis of measles, as a rule, is not very difficult. The coryza, catarrh, and cough, prepare us to expect that any rash will turn out to be measles. The crimson or raspberry-like colour of the rash, and its arrangement in concentric patches with intervening spaces of sound skin, is also characteristic. The rash of *roseola* is in some instances so like that of measles, as to have received the name of *false measles* ; but, as we shall

see presently, it is not accompanied by coryza or catarrh, or by any febrile symptoms except the very mildest. At a certain stage the eruption of *small-pox* may be mistaken for measles; but in small-pox the pimples are larger, or soon become so, and any difficulty, if there be any, is very soon cleared up by the way in which the rash progresses. The differences between *scarlet-fever* and measles are also sufficiently marked in ordinary cases, though it must be allowed that there are cases in which the character of the two diseases interblend—cases where the two diseases appear to coexist, as in those recently put on record by Dr. Murehison and others. In measles the fever preceding the rash extends over three days; in scarlet-fever only over one day. In measles, coryza, sneezing, dry cough at first, cough with expectoration afterwards, are the prominent accompaniments; in scarlet-fever, sore-throat without cough and expectoration. In measles, the rash is in crescentic or annular patches, and the colour of a dull crimson, or raspberry-like; in scarlet-fever, the rash is in large, irregular, undefined patches which interblend entirely when the disease is at its height, and the colour is bright scarlet, like

that of a boiled lobster. In measles, there is a sweetish odour before the decline of the eruption, and a sourish odour for some short time afterwards; in scarlet-fever, the odour is like that of old cheese. A state of ill health remains for some time after both affections, but dropsy is not the prominent character of this state after measles, as it is after scarlet-fever; in other words, the disease of the kidney, which is so common a consequence of scarlet-fever, is not a consequence of measles.

The treatment of measles must be conducted upon the same general principles as the treatment of scarlet-fever. The great point will be to watch the chest, and to combat any symptoms of inflammation as they arise; and afterwards to take care that any diarrhœa does not exhaust the patient. In order to this, we must have recourse to ordinary means. The cough will require mucilaginous drinks, and an addition to the medicine of a few drops of ipœacuanha wine or of compound tincture of camphor, or a grain or two of Dover's powder; but *active* treatment at any time, or for any cause, is not very likely to be called for.

6. ROSEOLA.

SYN. False Measles. *Fr.* Roseole. *Germ.* *Feuchtmasern.*

Roseola is characterised by superficial, irregular patches of a bright rosy hue, attended by some itching and tingling, becoming deeper in colour in passing off, affecting several parts of the body at one and the same time, and preceded and attended by a slight degree of feverishness.

The varieties of roseola are somewhat vague in their characters. *R. variolosa*, *R. vaccinia*, *R. febrilis*, *R. arthritica*, *R. rheumatica*, are nothing more than the superficial erythema attending upon small-pox, cow-pox, and so on. *R. æstiva* and *R. autumnalis* are so called from the season in which the rash happens to occur. *R. infantilis* is the variety often occurring in infants during teething, or when the intestines or stomach are out of order. In a word, roseola may occur under the most varied circumstances; and, from the fact that the rash is named from those circumstances rather than from any peculiarity in itself, we may argue that the affection itself is somewhat vague and undefined.

Rayer regards it as a variety of erythema; and no doubt the characters of the two affections interblend in many ways, particularly in some of the more chronic forms, as in *R. annulata*; but roseola is a more febrile malady than erythema. Indeed, the connexion between roseola and measles is closer than the connexion between roseola and erythema. Roseola, indeed, is often called *false measles*, and, so far as the rash is concerned, the distinction is not always easy. The distinction, however, is marked enough, if we regard the other characteristics of measles—the marked fever, the coryza and catarrh, and the obvious contagiousness. It must be remembered, also, that in some of the more acute forms of roseola, as in *R. æstiva*, there may be so much sore throat as to simulate *scarlet fever* not very remotely.

No special treatment is required for roseola, under ordinary circumstances, beyond a little rest and abstinence—sometimes abstinence from particular things, as shell-fish, spices, pickles, or alcoholic drinks.

7. TYPHUS.

SYN. *Fr.* Typhus contagieux. *Germ.* Fleckfieber,
Petechial-Fieber.

The characteristic eruption of typhus fever consists of very slightly elevated flattened spots, of a mulberry colour, each spot irregular and undefined in outline, and disappearing completely for a moment under the pressure of the finger. The mulberry colour is characteristic—so characteristic, that Dr. Jenner speaks of the eruption as the *mulberry rash*. In two or three days the spots do not entirely disappear under pressure, and their colour is then deeper, and their form more defined. After this, they quickly grow paler and paler, and disappear, unless patechiæ make their appearance, when it is a common thing for patechiæ to take their place. The spots forming the mulberry rash are usually very numerous, and sometimes the skin is wholly covered by them, except the skin of the face, which is generally entirely free. The colour varies much in different places; it is much darker upon the back, and in dependent positions generally. According to

Dr. Jenner, the rash is paler and more scanty in patients under fifteen years of age.

The mulberry-rash, as a rule, comes out between the fifth and the eighth day from the commencement of the fever, but sometimes it is deferred until the end of the second week ; as a rule, also, it continues to come out for three days, and it disappears in the course of the third week of the fever ; but there is considerable irregularity in the times of appearing, continuing, and retiring.

In some instances, the colour and disposition of the rash has borne a considerable resemblance to that of measles, and for the time typhus has been known as the *spotted* or *rubeoloid fever*.

In addition to the mulberry rash, which is essential, are certain other eruptions which are non-essential, but by no means uncommon, as *patechiæ*, *vibices*, and *sudamina*. *Patechiæ* are minute points of blood effused in the superficial layer of the dermis, or more rarely beneath the epidermis ; *vibices*, or *ecchymoses*, differ from *patechiæ* only in their greater size. The colour of these spots is dusky crimson or purple ; their edge is well defined, and they

do not disappear under pressure. In fading, the colour becomes successively reddish brown, greenish yellow, and yellow. They occur most frequently on the back, on the groin, and at the bend of the elbow; they happen at no regular time, but never early, unless the fever be of an unusually putrid character. They remain after death; and in this they differ from the mulberry spots, which disappear after death, except in those cases in which they have been more or less transformed into *patechiæ*.

It is very possible, in some instances, to mistake the mulberry spots of fever for flea-bites; but the latter are generally easily distinguished by their round, red stain, with a dark spot for the centre.

The other non-essential eruption of fever is less common than *patechiæ*. It consists of minute vesicles, filled with limpid fluid, and appearing like so many small drops of water upon a pale skin. These vesicles, or *sudamina*, as they are called, are sometimes so common as to give a character to an epidemic of fever; but they are less common now than they were when hot plans of treatment were in vogue.

An erythematous or erysipelatous condition, leading to excoriation or sloughing in the parts subjected to pressure, as the shoulders, the elbows, the sacrum, the hip-bones, may also be mentioned as an affection of the skin apt to occur in the later stages of fever; but this state is common to all conditions of exhaustion in which the patient has to remain for some time in the recumbent position.

After a preliminary stage, which Dr. Watson characterises as one of *drooping*, or suddenly and without this stage, a state of "febrile oppression" is ushered in by shiverings. The patient becomes dull, giddy, wakeful, head-achy, and his "muddled" countenance is fully expressive of this fact; he experiences, also, a feeling of weakness which obliges him at once or very soon to keep his bed. At the same time, the skin becomes dry and hot, the pulse quick, and there is complete loss of appetite, with thirst. By degrees, often by very quick changes, signs of increased prostration show themselves—the pulse becomes quicker and weaker, dark sordes accumulate on the lips, teeth, and gums—the tongue becomes drier, and with a dark streak down the centre—the

headache gives place to low delirium—the patient lies flat on his back, and slips down in bed from sheer inability to lie on his side, or to keep himself up in the usual posture; the senses are dulled, thirst is no longer complained of, the urine and motions pass unnoticed, the tendons twitch, the parts subjected to pressure become red and inclined to slough. At a more advanced stage still, symptoms of a putrid character make their appearance, a cadaverous odour exhales from the body, the tongue becomes black and fissured, the extremities, &c., give up their warmth, sloughing bed-sores are formed, and stupor leading to coma, or oppressed breathing leading to suffocation, or a falling pulse leading to utter exhaustion, prepare the way for the fatal issue. Under more favorable circumstances, the symptoms of febrile oppression and prostration by degrees pass off.

The mulberry rash does not show itself until the general symptoms are indicative of considerable prostration, the petechiæ are deferred until this exhaustion is unmistakeable and prominent; often until the symptoms are beginning to partake of a putrid character.

Filth, foul air, the privation of proper wholesome food, mental depression, debilitating circumstances generally, are predisposing causes of typhus, as of so many other diseases; but, with the exception of an atmosphere polluted by the products of respiration, as in overerowed sleeping apartments, it is doubtful whether these are of themselves exciting causes. It would seem highly probable, indeed, that typhus is entirely a product of overerowing under circumstances in other respects also insanitary.

Some time ago, there was a disposition to doubt the operation of contagion as an exciting cause in any fever, almost in any disease; but now the current of thought is changed, and it is very generally allowed that typhus, once set alight, is propagated freely by contagion.

The staple articles of treatment in typhus are free ventilation, frequent tepid spongings of the skin, toast and water, some simple saline, mild aperients if the bowels are sluggish, and early support by beef-tea and broths, wine and brandy. While there is much wakefulness and restlessness, opiates in very small doses may be of great service. When there is increasing stupor, a blister to the shaven scalp may be very

useful. Other special symptoms must be treated upon general principles, always remembering that prostration is the great danger to be apprehended, and that the indications are for supporting measures rather than for depressing measures. Indeed, as we see the disease now, and with our changed views upon the treatment of disease generally, it is not very likely that bleeding in any form, or mercurials, or antimonials, or purgatives, are likely to figure prominently in the treatment of typhus.

In order to prevent excoriation and sloughing in the parts subjected to pressure, these parts should be repeatedly washed with brandy, and the pressure shifted from them by properly arranged pillows, water-cushions, water-beds, and so on. If the skin be broken, it may be covered with layers of collodion varnish, with amadou, &c.

A great deal has been said lately about the possibility of cutting fever short, and recently it has been said that this may be done, in continued as in intermittent fever, by giving quinine in doses large enough to produce *cinchonism*, but the results of this practice, as of all other practices adopted with the same

view, are not satisfactory, and we are left to the conclusion that fever, once developed, must go through a certain course.

8. TYPHOID FEVER.

SYN. *Fr.* Dothinenenterite. *Germ.* Typhusartig.

The eruption in this form of fever consists of minute, slightly elevated pimples, of a *bright-rose colour*, and surrounded by a narrow, undefined areola of the same colour. These bright rose-coloured spots appear generally during the first week of the disease, and, according to Dr. Jenner, they may go on appearing until the thirtieth day; they continue out for about three days; they are never transformed into petechiæ, as happens not unfrequently with the mulberry spots of typhus; their number at one time is never large—from six to twenty ordinarily; and they disappear after death.

The general symptoms of typhoid fever are the same as those of typhus fever; but there are certain differences, besides the eruption, which are sufficiently characteristic. In typhoid

fever, the disease begins more insidiously, the state of febrile oppression is less marked, the delirium is more active, and from the beginning, or very soon after the beginning, there is a diarrhœa, which proceeds with the disease, which is accompanied with tenderness and slight gurgling in the region of the cæcum, and which is symptomatic of an inflamed and ulcerated condition of the glands of Peyer and the solitary glands. The course of typhoid fever is also more prolonged than that of typhus fever, and, from this difference, the first-named disease is often spoken of popularly as the twenty-one days' fever, the last-named disease as the fourteen days' fever; the period of convalescence is also more prolonged in typhoid fever, apparently from the time required to repair the ulcerated condition of the intestine. There are also peculiar dangers attached to this same ulcerated condition—danger of hæmorrhage, danger of perforation, which dangers are peculiar to typhoid fever. In a word, typhoid fever would seem to be merely symptomatic of a local lesion, namely, of the inflamed and ulcerated condition of the glands of Peyer and the solitary glands, and in this

it differs entirely from typhus fever, which is altogether independent of any local disorder.

The treatment of typhoid fever must be conducted upon the same general principles as the treatment of typhus fever, with certain modifications necessitated by the ulcerated condition of the bowels. Diarrhœa being a prominent symptom, astringents are more likely to be in request than aperients—astringents, such as Dover's powder, or some other opiate, in proper dose, tincture of catechu, and so on; or a warm linseed-meal poultice, or spongopiline, moistened with water, and sprinkled with a few tea-spoonfuls of laudanum, may be required to relieve uneasiness or tenderness in the abdomen; or a blister to the abdomen may be called for, where there is tympanitic distension of the bowels, with trifling tenderness. Greater heed must also be paid to the diet during convalescence, care being taken that any error is on the side of abstemiousness; and greater stress must be laid upon the necessity of rest, until the cessation of the diarrhœa, and the reappearance of natural stools, and other symptoms, show that the ulcerated condition of the bowels is fairly repaired.

9. PURPURA.

SYN. Purples. *Germ.* Blutfleckenkrankheit.

The purple (purpura) and livid spots or patches, which are characteristic of this affection, are due to the escape of blood from the capillary vessels into the tissues of the skin and mucous membrane—in extreme cases into the tissues of any and almost every organ. These spots or patches do not disappear under the pressure of the finger, as they would do if they depended upon mere congestion of the blood-vessels; their outline is very clearly defined and sharp, and this distinctness is brought into strong relief by the paleness or sallowness of the intervening skin; and, as a rule, they are not at all raised above the surface of the skin. According to their size and form, they have received different names—*stigmata*, when mere points or specks—*petechiæ*, as the name signifies, when they resemble flea-bites—*vibices* and *ecchymoses*, when large and irregular.

In purpura, the blood is wanting in fibrine and otherwise seriously altered in quality. It always

coagulates imperfectly, and sometimes it is incoagulable. And, as might be expected from the state of the blood, the general health is most seriously deranged. The natural accompaniments of purpura, indeed, are sea and land-scurvy on the one hand, low fever on the other hand.

The worst form of purpura, and also the most typical form, is known by the name of *land- or sea-scurvy* (*P. hæmorrhagica*). The eruption begins in the legs, and extends by degrees to the trunk; but it does not usually reach the face and arms. In confirmed cases, however, it may affect the mucous membrane of the eyes, nose, mouth, and throat. As the disease advances, in addition to the ordinary forms of the eruption—*stigmata*, *petechiæ*, *vibices*, large vesicles containing blood are apt to make their appearance, and any pressure on the skin may squeeze blood out of the vessels, and give rise to ecchymoses, until, at length, there is scarcely a patch of skin which is not discoloured. At the same time the gums are spongy, and apt to bleed; everywhere, indeed, and particularly in the mucous membranes, the vessels seem to be no

longer able to prevent the blood from oozing through, and in this way those hæmorrhages are frequently taking place which give the name to the disease, and constitute the chief source of danger.

The accompanying constitutional symptoms indicate extreme ill health—feeble and quick pulse, muscular debility, prostration, a disposition to faint, offensive breath, urine loaded with phosphates, œdematous swelling of the legs, and so on.

Purpura contagiosa is the name given by Willan to the petechiæ and vibices occurring in typhus fever. These spots occur under the circumstances which have been already noticed when speaking of typhus fever, when the vital powers are entirely prostrate, and when there is a disposition to putridity, which corresponds in no remote degree to the last stage of sea-scurvy.

Purpura simplex is a milder form of *P. hæmorrhagica*—the first stage, so to speak, of the more serious disease. *P. urticans* appears to be nothing more than *erythema nodosum* in a person of a scorbutic habit. *P. senilis* is nothing more than a trivial subcutaneous effu-

sion of blood, not unfrequently met with in the arms of old washerwomen, &c.

The causes of purpura have been already sufficiently considered in the introduction, and there is no necessity again to revert to the subject.

The treatment of purpura must consist, in the main, in the proper regulation of the diet, and chiefly in the substitution of fresh meat for salt and stale provisions, and in the supply of succulent fruits and vegetables. Acid juices, such as those of the lime and lemon, are undoubtedly of the highest use, as the experience of navies in all parts of the globe abundantly proves, but fresh vegetables in quantity are the remedies at which we should rather aim. A good stock of potatoes, in all probability, will be as useful as an ample supply of lime-juice, in preventing and curing scurvy. Port wine and good malt liquors must also be looked upon as of essential service.

Bitters, in conjunction with acids, as the nitro-muriatic, appear to be most suitable as medicines; mercurial alkalics are least suitable. A dose of blue pill has, on several occasions, been the immediate cause in the development

of the eruption of *purpura simplex*; and though Dr. Garrod has endeavoured to show that bicarbonate of potass is serviceable, the arguments are not at all cogent on his side of the question.

CHAPTER III.

PAPULÆ.

PAPULÆ or pimples are small, solid, acuminate elevations of the skin, not obliterated under pressure, varying in colour from white to red, and ending commonly in scurf, occasionally in superficial ulceration and scanty crusts. Under this head are

Lichen,
Prurigo.

1. LICHEN.

The pimples of lichen are conical, about the size of a millet seed, sometimes of the natural colour of the skin, but usually reddish; and their end is either in scurfy desquamation or in

superficial ulceration. They are attended by a very disagreeable itching and tingling; they are distributed with tolerable uniformity over a great part of the trunk, or else they are collected in patches of various and irregular forms. In cases where they are numerous and closely aggregated, the patch of skin on which they are placed may present a deep erythematous blush, but the redness connected with each pimple is almost wholly confined to the strict limits of its base. The course of the disorder is not very definite: ordinarily the redness and itching decline in three or four days, and in six or seven days more the pimples have disappeared, and the scurf skin is peeling off; but successive crops may keep coming again for weeks, or months, or even years, and when this is the case the skin becomes thickened and inflamed, and the amount of scurf is proportionably increased. Mr. E. Wilson looks upon "the pimple of lichen as the pore of one of the excretory tubules of the skin, raised into an abnormal position by inflammatory congestion of the capillary plexus which constitutes the vascular wall of the tubule."

Lichen is divided into two species, *L. simplex*

and *L. agrius*, and these are again subdivided by various authors, with various degrees of minuteness. Under the head of *L. simplex*, the principal varieties are *L. circumscriptus* and *L. gyratus* (so named from the form of the patches), *L. urticatus* (in which the characters of the lichenous affection interblend with those of urticaria) and *L. strophulus*. The latter, which occurs in infants before weaning, is again subdivided, according to the colour of the rash, into *strophulus intertinctus* (red gum), *S. confertus* (rank red gum), *S. candidus* v. *albidus* (white gum), and so on. *Lichen agrius*, as the name implies, is a wilder or fiercer form of the disease than *L. simplex*. It is accompanied with more itching and burning and redness, and very soon the summits of the pimples are torn off by scratching, and the superficial ulcers which result are covered with thin, yellowish sealy crusts. The acute symptoms generally subside within a fortnight; but the affection may, and generally does, pass into a subacute or chronic form, in which the skin under the eruption is sure to become considerably thickened, and often fissured. The prickly heat of hot countries is a form of *L. agrius*—*L. tropicus*.

: In its simple typical form, lichen is most easily confounded with the affection which has next to be mentioned, prurigo, but it may always be distinguished, as we shall see presently, with a little care. Eczema and scabies resemble it in the accompanying itching, but the vesicular characters of these affections will serve to distinguish them in ordinary cases. With chronic *L. agrius*, it is more difficult to perceive the line which separates it from chronic eczema; for there is the same itching, the same thickened and chapped condition of the skin, and often the same sort of incrustations. In long-standing cases, also, it is often impossible to find anywhere a characteristic pimple of lichen, or a characteristic vesicle of eczema. In this chronic stage, however, several diseases, which are sufficiently distinct in their origin, merge very nearly, if not entirely, into one and the same condition; and so, in fact, it must be, for the chief characteristics of skin disease require for their development a perfect condition of skin which no longer exists in these cases. In chronic *L. agrius*, however, the surface of the skin under the crusts is usually much less smooth and shining than it is in chronic eczema.

A light antiphlogistic regimen, a few tepid baths, and a free action upon the bowels will, in all probability, be all that is necessary in the treatment of acute lichen. In infants, the gums may have to be lanced; in adults, hydrocyanic acid, or, as in a case recently under treatment, tincture of aconite may be of much use in allaying the troublesome itching. In the chronic and severe forms of the disease, the treatment is often very difficult. Sometimes a gouty tendency, or a syphilitic taint, requires to be considered before any progress can be made; often arsenic, properly given, is the only medicine which makes a favorable impression. In some cases, much good seems to have resulted from the frequent use of alkaline or sulphur baths; in others, friction, with some mild form of mercurial ointment, has been most beneficial; in others, the simple exclusion of air by means of collodion varnish has answered, where both the previous measures have failed. In two cases of *lichen agrius*, recently under treatment, much comfort and despatch in treatment seemed to result from the combination of aconite with a mild mercurial ointment, as in the following recipe :

R. Extr. Aconiti, ʒiv ;
 Ung. Hydr. Nitratis Mit., ʒij ;
 Ung. Aquæ Rosæ, ʒx.
 Tere simul.

2. PRURIGO.

SYN. Itchy Rash. *Germ.* Hautjucken.

The pimples of prurigo are larger than those of liehen, and, as the name implies, *itching* is their character, which supersedes all others. Intolerable, burning, maddening, are epithets applied without exaggeration to this itching. The pimples of prurigo are not only much larger, but they are also distinguished from those of liehen by being isolated, scattered, and of the same colour as the skin. Usually their summits are torn by scratching, and covered by small dark-brown crusts of dried blood. The marks of scratches, also, are rarely absent in the neighbouring skin, which skin, moreover, is usually coarse, thickened, and of a yellowish dirty colour.

The itching, almost constant, and scarcely ever trifling, is greatly increased by stimulants,

food, exercise, even by the warmth of the bed; and it is this last circumstance which distresses the sufferer most, and tries his health by robbing him of his nightly rest.

Prurigo generally occurs upon the shoulders, back, and neck, or about the genital organs and anus; and, once developed, it may continue for months or even years. Its course is always chronic and obstinate, often intractable.

P. mitis is bad enough; *P. formicans* is worse. The epithet "formicans" is intended to signify that the itching is not unlike that which might be produced by the creeping and stinging of innumerable ants. *P. senilis* is prurigo grown old in age, but not weak in strength. It is usually met with in weakly constitutions, whether in old or young, and itself has often not a little contributed to ruin the health. In this variety the patient often swarms with lice, in spite of his attempts at cleanliness. *P. podicis*, *P. scroti*, *P. pudendalis*, indicate the seat of the disorder; but the qualifying names do not convey any idea of the distress which is occasioned, or of the evil which may result. In the latter case, indeed, the constant scratching may lead to symptoms ap-

proaching very closely to satyriasis and nymphomania.

Prurigo is distinguished from lichen by the larger size of the pimples, by their paleness and flatter form, by the severity and burning character of the itching, and by the coarse, thickened, and yellowish skin. The marks caused by scratching are more common in prurigo, but they are also met with in lichen. Scabies cannot well be mistaken for prurigo, if common care be taken.

A rigidly plain diet, in which alcoholic drinks, spices, pickles, and all substances which are known to be indigestible, are omitted, is a primary requisite in the treatment of prurigo; and frequent baths are scarcely less necessary. As general remedies, those must be prescribed which are indicated by the state of the system; Iodide of Potassium in one case, alkalies and bitters in a second, arsenic, perhaps, in a third, and so on. When ordinary measures fail, opium, says Dr. Watson, is our best and, indeed, our only resource. As local remedies—and it is on these that confidence must chiefly be placed—the names of the numbers tried are indeed legion: vinegar, prussic acid in emulsion of bitter

almonds, infusion of digitalis, tar ointment, some form of mercurial ointment, and many others. Dr. Watson speaks of a case in which great benefit resulted from the use of an ointment containing aconitine; and from the results which have followed in two cases in which we tried this ointment, we are disposed to attach more confidence to it than to any other method. We think, also, from what we saw in these two cases, that aconite, carefully used, is likely to prove most valuable as an internal remedy in this most distressing affection. Yellow wash, (a solution of one draehm of corrosive sublimate in a pint of lime-water,) has often proved very useful; and citrine ointment (ointment of the nitrate of mercury), rubbed in twice a day, after sponging the parts with vinegar, is also recommended.

In some cases alkaline or sulphur baths may do good; in others it is difficult to prevent the suspicion that they irritate rather than soothe. Ordinary baths, at a suitable temperature, are always serviceable.

In *prurigo podicis*, ascarides (thread-worms) in the rectum may greatly aggravate the distress; if so, they must be removed by the injec-

tion of infusion of quassia, &c. In *P. scroti*, and *P. pudendalis*, pediculi may add greatly to the irritation; if so, a few applications of yellow wash, or of a lotion containing corrosive sublimate, will be an essential part of the treatment.

CHAPTER III.

VESICULÆ.

VESICULÆ, or vesicles, are small circumscribed elevations of the scarf-skin containing serum, at first (both in their coats and contents) transparent, afterwards white and opaque, and ending in the formation of scurf or thin crusts. Under this head are ranged—

Varicella,
Sudamina,
Eczema,
Herpes,
Seabies.

1. VARICELLA.

SYN. Chicken-pox, Water-pox. *Fr.* Varicelle. *Germ.*
Wasserpocken, Pöthnerpocken.

The eruption of varicella consists of vesicles of various sizes, non-umbilicated (*i.e.*, without

any central depression), separate from each other, numerous, and usually affecting the breast, shoulders, and neck, in preference to the face. These vesicles are generally preceded and attended by slight febrile symptoms; they lose their original transparency, and become opaque and pear-like on the second or third day; on the fourth day they are shrivelled and surrounded by a faint red areola; on the fifth day they are fairly dried up; on the sixth day they have changed into small brownish scales, which soon crumble off, and leave very faint stains, which also vanish speedily, unless the vesicles have been irritated by scratching, when more slowly vanishing stains and slight permanent scars may be left behind. Crops of vesicles may come out in succession for three or four days.

When the vesicles are larger than usual, and globular, the eruption is designated *V. globata*, or *swine-pox*; when they are smaller and lenticular, as they are usually, the designation of the eruption is *V. lenticularis*, or *chicken-pox*, properly so called.

Varicella, or chicken-pox, has been thought by many to be a modification of small-pox, or variola, and certain it is that cases of chicken-pox are

common in many epidemics of small-pox; but there are certain differences which appear to preclude the idea of any very close connexion between the two. It is doubtful whether chicken-pox is contagious; it is certain that it cannot be communicated by inoculation. It is certain, also, that chicken-pox may occur shortly after small-pox and cow-pox; and that small-pox may be developed, and vaccination take effect, immediately after an attack of chicken-pox. The differences between the vesicle of chicken-pox and the pustule of small-pox, as will be seen presently, are not easily reconciled with the notion that they are merely varieties of the same disease.

Varicella is a very trifling affection, and any treatment it may require will simply be that of slight feverishness.

2. SUDAMINA.

SYN. Miliaria. *Germ.* Schweltsbläschen.

Sudamina are prominent, distinct, rounded vesicles, of the size of millet-seeds, (whence their other name *miliaria*), which lose their original transparency and become opaque and pearl-like in twelve or twenty-four hours, and end

in the formation of seurf or thin scales in the course of three or four days. They are attended with very trifling itching and redness of skin ; and their most usual seat is on the trunk.

Sudamina are met with not unfrequently during hot weather in persons of a thin and irritable skin, and also in eruptive fevers, acute rheumatism, &c. They were often met with, in the latter case, in the days when a well-ventilated room, and a cooling regimen did not form a necessary part of the treatment of active febrile disorder.

Any treatment is that which is required by the primary disorder.

3. ECZEMA.

SYN. Humid Tetter, Running Scall. *Fr.* Croûtes laiteuses.
Germ. Eczem.

The typical eruption of eezema consists of closely-packed clusters of minute pale vesiele upon a very slightly inflamed surface. It is accompanied by smartings, which are increased rather than relieved by scratching ; it is unaccompanied by any very obvious degree of feverishness ; it is succeeded generally by super-

facial discharging excoorations, covered with thin flaky crusts. As is implied in the common name, *humid tetter*, discharge is a prominent feature of the affection. Eczema is not contagious.

There are several varieties of this affection. *E. rubrum* is a variety in which simple eczema is associated with some slight amount of erythema. *E. impetigirodes* implies a still higher degree of erythema, or even erysipelas—a degree in which there is often considerable tumefaction and heat of skin, as well as intense redness. In both these varieties, and particularly in the last, the vesicles are soon filled with a semi-purulent, sickly-smelling fluid; the resulting crusts, instead of being thin and flaky are thick, yellow, and lamellar, and the skin under the crusts is raw and fiery red. There is also a copious secretion from this raw fiery surface of the same sickly-smelling fluid with which the vesicles are filled, and by this secretion the neighbouring parts are irritated and inflamed, and a rapid succession of fresh crusts is provided, until the inflammation begins to subside. Until the inflammation subsides, there is also much heat and itching, and by this

heat and itching the patient is pretty sure to be worried into a state of considerable feverishness, particularly if the seat of the eruption be (where it often is) upon the genital organs or around the anus.

Each variety of eczema may occur in a chronic or in an acute form; and in the chronic form the skin may be thickened and chapped, and the general appearance one which cannot well be distinguished from that of lichen agrius or psoriasis. Occurring on the face of infants and young children, eczema has frequently been described as *crusta lactea*. Caused by a mercurial application to the skin (no unfrequent event), the form, which is *E. rubrum* generally, has been called *E. mercuriale*.

The difference between any of these forms of eczema and the two previous vesicular disorders are obvious; the differences between them and the disorders yet to be considered will be best attended to hereafter. Chronic eczema agrees in many respects with lichen agrius—in the chapped and excoriated state of the skin, in the acrid discharges, and in the character of the crusts; indeed, the two affections are only to be distinguished by means of their previous

history—by the fact, that is, of one beginning in a papular, and the other in a vesicular eruption.

A scrupulously regulated diet as to quantity and quality, particularly as to the former, and a strict attention to all matters relating to hygiene, is necessary to make any favorable impression upon chronic skin disease, and eczema is no exception to the rule. Eczema is often said to act as a safety-valve to the health of the system, and fears are entertained as to the consequences of checking the discharges suddenly; but there is little need of a safety-valve, and small occasion for fear, if the source of the discharge be cut off by a proper regulation of the diet and habits—if, that is, the patient will, with Falstaff, “purge and live cleanly as a gentleman ought.” The medicines wanted will be very different in a recent and in a chronic case. In a recent case, small doses of mercurials or saline aperients, with the addition of an alkali, will often do wonders; in chronic and inveterate cases, iodide of potassium, or Fowler’s or Donovan’s solution, or tincture of cantharides, are not unlikely to be required. Each case, indeed, must be treated according

to the particular indications which it presents, and the rapidity of the cure must always depend upon the way in which these indications are recognised and acted upon by the medical attendant. The local measures are very varied. If there is much discharge, a very beneficial effect will often be produced by dusting over the part with oxide of zinc, or powdered starch, and afterwards dressing with some soothing unirritating ointment, such as the benzoated oxide of zinc ointment, recommended by Mr. E. Wilson. If there is much irritation and itching, the aconitine ointment may be used, or glycerine containing a small quantity of morphia, or a weak solution of nitrate of silver, gr. j to an ounce of water. Mr. E. Wilson recommends very strongly this latter solution, where there is an unusually sensitive state of the skin and eruptions; and we have often been satisfied of the value of this recommendation. In inveterate and chronic cases, the ointment of the nitrate of ammonio-chloride of mercury, variously diluted, will be required.

Lotions, water-dressings, poultices, appear to be of doubtful advantage. In the majority of cases, indeed, they seem to make the skin

more tender, and the discharge more copious, and no progress is made in the way of recovery so long as they are used.

4. HERPES.

SYN. Tetter, Fret. *Fr.* Herpès. *Germ.* Flechte.

The vesicles of this eruption are prominent, and of unequal sizes; the least larger than those of eczema, the largest as large as a bean; they are arranged in clusters upon patches of inflamed skin; they run a definite course of about ten days; they are attended by considerable heat and itching, and by some feverishness; they end in the formation of lamellar crusts. Herpes is not contagious.

The varieties of this eruption are named sometimes from the locality affected, as *H. labialis*, *H. præputialis*; sometimes from some peculiarity in form or colour, as *H. zoster*, *H. circinatus*, *H. iris*.

H. labialis is a common attendant upon catarrh and pneumonia; it is now and then accompanied by a similar eruption upon the uvula and fauces. *H. præputialis*, not unfrequently mistaken for some syphilitic affec-

tion, is generally the result of inattention to cleanliness. *H. zoster*, or *zona*, or *shingles* (apparently from *cingulum*, a girdle), is a curious and by no means uncommon variety of the disease, in which the eruption is usually arranged as a belt half round the body. It is a curious and unaccountable fact, that shingles occur almost invariably on the right side. In some rare instances the eruption may go on extending until it makes the complete circle of the trunk, but this rarely happens; at any rate, there is no foundation for the idea, which is as old as the days of Pliny, that the disease is fatal when it thus surrounds the body. Shingles are not unfrequently preceded by severe neuralgic pains in the part, and these pains are apt to remain for some time after the eruption has disappeared; but, as a rule, there is little feverishness, either precursory or attendant. *H. circinatus* is a very common variety. It is an inflamed red ring, with the characteristic vesicles upon it. It usually affects the face and neck, and upper part of the body generally. *H. iris* is a very rare variety. It consists of red central patches of herpetic eruption, each patch being surrounded with

concentric red rings of different shades of colour. *H. phlyctenodes* is the name often given when the eruption is somewhat acute and extensive.

The distinction between the typical forms of eczema and herpes are sufficiently marked. In herpes the vesicles are larger, and of unequal size; they are also seated upon an inflamed base. In eczema the vesicles are minute, and of equal size, and they are not seated upon an inflamed base, until there has been time for this base to become excoriated by the discharge. *H. circinatus* may easily be confounded with *erythema circinatum*; indeed, it is not to be distinguished from the affection, unless some of the characteristic vesicles happen to remain.

The acuter forms of herpes, *H. phlyctenodes* and *H. zoster*, require a moderately antiphlogistic plan of treatment; other forms, as *H. circinatus* and *iris*, often require tonic remedies and a generous diet. It is chiefly in cases of shingles where any direct medical treatment is required; and here the principal object is to relieve the local pain by local measures, among which, aconite ointment and opiated

glycerine will occupy an important place, and by the internal use of opium and aconite, one or both, if the local measures are not sufficient. In a case under treatment by a friend, about twelve months ago, a large dose of quinine (five grains) immediately put a stop to pain which had tormented the patient for five days previously, and which had got worse rather than better under the use of a saline aperient containing some tincture of colchicum.

In ordinary cases of herpes, the application of the benzoated oxide of zinc ointment will be sufficient as an external application, or, (where it is desirable to check the progress of the vesicles, and to bring about a more speedy cure), the ectrotic plan of treatment may be adopted; that is, the vesicles may be punctured, and a sharp point of nitrate of silver be introduced into the opening for a moment.

SCABIES.

SYN. Itch. *Fr.* Gale. *Germ.* Krätze. .

The vesicles of scabies are minute, separate, slightly acuminated. As the common name

“itch” implies, they are attended with a good deal of local itching; but they are unattended by any kind of constitutional disturbance. Scabies is certainly contagious.

Any part of the body may be affected, but the parts most commonly affected are the spaces between the fingers. The face almost invariably escapes, and the reason of this is supposed to be found in the more frequent and careful washings of this part. The time occupied in the development of this disorder varies in different individuals, and at different seasons; being shortest in the case or place where the skin is most delicate, and the weather most genial. The limits of variation would seem to be from four to twenty days. The itching is greatly increased by warmth, as by the warmth of the bed, and by all stimulating food and drink.

The immediate cause of scabies is a minute insect—the *acarus scabei*, which lodges in a burrow communicating with the vesicle, but not in the vesicle itself. Its locality is indicated by a white spot, about two lines distant from the edge of the vesicle, and from this spot it may easily be dislodged by a

needle. To the naked eye it appears, when thus dislodged, as a small, writhing, white corpuscle; under the microscope all its odious features become more clearly revealed.

Scabies presents several varieties. *S. papuliformis* and *S. purulenta*, for instance, are varieties in which the normal characters of the vesicle interblend respectively with those of the pimple and pustule. Scabies, moreover, is often complicated with other eruptions.

Scabies may be confounded with eczema, particularly with *E. simplex*, but more frequently still with prurigo and lichen simplex. The vesicles of *E. simplex* are in clusters, not separate, globular, and scarcely raised above the surface of the skin, not acuminate, and the itching is aggravated into painful smarting by scratching, not relieved; the *acarus scabei*, also, is wanting, and there is no contagiousness. The papular character of prurigo, and the absence of the vesicle and insect of scabies, will sufficiently distinguish the affections. In prurigo, moreover, the skin is thickened and altered, and the thickest part of the skin, as that of the back and shoulders, and the outer sides of the limbs, is chiefly affected; the itching, also, is

much more severe. It is to be remembered, however, that eezema and prurigo may occur as a complication of seabies, and that much care may be necessary in these cases to form a correct diagnosis.

It is not easy to mistake the pustular forms of seabies for impetigo or eethyma; for, as we shall see presently, the characters of these pustular affections are sufficiently distinct.

Seabies never gets well of itself, and it never fails to get well under treatment. This treatment, also, is purely local. The old remedy, and still the most effectual, is sulphur ointment, rubbed in carefully night and morning for three days, and then a thorough wash in soap and warm water. During the treatment, it is desirable to wear flannel next the skin night and day; for this helps not a little by keeping the skin warm, and in securing the thorough inunction of the parts. The objections to this mode of treatment are in its dirtiness, and in the unpleasant smell of the medicine; but these are quite overruled, under ordinary circumstances, by its efficacy.

Sulphur fumigations, sulphuretted hydrogen lotions, have also been tried extensively, and with success; but the simple sulphur ointment is at once more readily applied, and more effectual. Of any other remedies we have no experience, but we cannot argue very favorably from the recorded experience of others.

It must always be remembered that itch may readily be recontracted from clothes, and that the clothes worn previous to treatment ought either to be destroyed, or else submitted for some hours to a thorough fumigation with sulphur.

CHAPTER IV.

BULLÆ.

BULLÆ, or blebs, are vesicles of larger growth, their size being sometimes as large as the egg of a pigeon, or even of that of a hen. They agree with vesicles in that their coats and contents are transparent or translucent at first, and opaque afterwards; they differ in being followed by marked ulcerations and crusts. Here belong

Pemphigus,
Rupia.

PEMPHIGUS.

SYN. Bleb Fever. *Fr.* Fièvre Bulleuse. *Germ.* Blasen-
ausschlag.

Pemphigus (πέμφιξ, a bleb), as the name implies, is an eruption of blebs. These blebs are of various, and often of considerable size;

the skin upon which they are placed is comparatively uninfamed; and usually they are accompanied by very trifling febrile disturbance. In three or four days they lose their original transpareney or transluceney, and their coats become shrivelled and soddened; in a few days more, the only remains are sealy, flattish, brownish crusts. When these crusts are detached, their place is usually marked for some time by slight discolorations, and sometimes by superficial ulcerations; but ulceration is not a common or marked feature of pemphigus. Blebs, following this course, may appear singly or in numbers; they may be confined to one part of the body, or extend at one and the same time to several parts; and they may succeed each other in crops for months, or even years.

Pemphigus is usually divided into acute and chronic; but the acute is always a rare disease, and, for any practical purposes, little need be said about it except this, that in proportion to the acuteness is the degree of feverishness accompanying the eruption. Indeed, there are no varieties requiring special consideration; for *P. infantilis* is only the affection occurring in

infants, and the sole distinction of *P. solitarius* is in the fact, that the eruption consists of one solitary bleb. The *P. contagiosus* of Willan is now allowed to differ from true pemphigus—an accidental occurrence in certain contagious and epidemic maladies.

The blisters which occur not unfrequently in erysipelas may easily be distinguished from the blebs of pemphigus by the serious febrile disturbance accompanying them, and by the swollen, red, and painful skin under and between the blisters. In herpes, the largest vesicles—such as are occasionally formed by the confluence of several in one (as in *herpes phlyctenodes*)—are small, when compared with the blebs of pemphigus; in herpes, also, there is always a considerable degree of inflammation in the subjacent and surrounding skin. In ecthyma, it sometimes happens that the cuticle may be raised into a bleb by the coalescence of several pustules, but in this case the contained fluid is, what it never is in pemphigus, true pus; and there are also other signs of distinction, of which more will be said presently.

The condition of the patient, in the majority

of cases of pemphigus, is one which suggests the necessity of corroborants and stimulants, rather than of antiphlogistic measures. The patient, in a word, is low, rather than feverish. In some cases, also, it would seem as if the system was affected by the working of some animal poison. But if not from the beginning, certainly very soon after the beginning, the diet must be nutritive and generous, and the medical treatment must be in accordance with the same—quinine, bark, and perhaps the sesquichloride of iron, being the remedies which are most likely to do good. The blebs may be punctured, and then dressed with the benzoated oxide of zinc ointment, or with an ointment containing Peruvian balsam (ʒj of the balsam in ʒj of spermaceti ointment.)

RUPIA.

SYN. Limpet-shell Scab.

The blebs of rupia are smaller and flatter than those of pemphigus. The serum with which they are filled is dirty, dark, or even bloody; the skin upon which they are placed

presents little or no redness, swelling, or tenderness; they are usually unaecompanied by any febrile disturbances, and their end is in unhealthy ulcers covered by peculiar, prominent, thick, imbricated scabs, not unlike limpet-shells.

There are two principal varieties of the affection. *R. prominens* is a variety in which largeness of the scab is the chief characteristic; *R. escharotica* is a variety in which ulceration is the predominant feature.

Rupia may be most easily confounded with pemphigus, but it is easily distinguished from this affection, first, by the smaller size and flatness of the blebs, and by the dirty darkness of their contents, and afterwards by the unhealthy ulcers covered by dark, limpet-shell-like scabs. With ecthyma there is less probability of any confusion, for ecthyma, as we shall soon see, is at first pustular, and the resulting ulcers and scabs are small and insignificant as compared to those of rupia.

The treatment of rupia must be conducted upon the same general principles as that of pemphigus; the only difference being, that there is greater necessity for nutritious food

and wine, for quinine and steel. Even the probability that there may be a syphilitic taint in rupia does not set aside these indications.

CHAPTER V.

PUSTULÆ.

PUSTULÆ or pustules are small circumscribed elevations of the scarf-skin, containing pus from a very early period, depending upon a somewhat deep-seated inflammation of the subjacent true skin, and followed by marked crusts. When vesicles become opaque, pus may be present in them; but, except when irritated, the inflammation connected with this form of eruption is not sufficient to produce pus, or, at any rate, not sufficient to produce pus at an early period. Under the head of pustules are—

Variola,
Vaccinia,
Impetigo,
Ecthyma.

VARIOLA.

SYN. Small-pox. *Fr.* Petite vérole. *Germ.* Pocken, blattent.

When fully formed, the eruption of small-pox consists of plump, yellow, hemispheroidal pustules; surrounded by damask red areolæ; but before reaching this stage, it has been in turn composed of hard, conical, red pimples and of umbilicated vesicles—of vesicles, that is, which are bound down in the centre by a navel-like depression. Following the pustules are scabs, and following these are transitory purplish stains, or permanent scars, according as the structure of the true skin has been less or more destroyed by the pustular inflammation. The pustules are symptomatic of high contagious fever.

Small-pox begins with sharp fever,—rigors, and often convulsion, then heat, dryness, redness of skin, nausea, and vomiting, severe pain in the back and loins, thirst, quick pulse, and so on. The eruption begins on the third day from the commencement of the fever, and continues to come out during the fourth and fifth days. It begins on the face; it ends on the

legs; and there is generally a period of two full days between the time of its appearance upon these opposite extremities of the body. For the first two days after its appearance, the eruption consists of simple pimples, and at an early period the appearance of the skin may not be unlike what it is in some of the observer forms of scarlet fever or measles. On the third day after the appearance of the eruption, a small quantity of clear lymph is present under the summits of the pimples. During the fourth and fifth days from the appearance of the eruption, the quantity of fluid increases, and the pimples are transformed into flattened, umbilicated vesicles, with opaque coats and contents, and surrounded by narrow red areolæ. On the sixth day from the appearance of the eruption, the vesicle is changed into a pustule by the contents becoming transformed into pus; and contemporaneously with this change, the umbilical depression which was characteristic of the vesicle is lost, in consequence of the giving way of the *bride* to which this depression was due. During the seventh and eighth days from the appearance of the eruption, the pustules increase in size, and become turgid and

hemispheroidal; the areola becomes more extensive, and deepens in colour into a damask red; and the skin generally begins to swell considerably, in consequence of the extension of the inflammation to the subcutaneous cellular tissue. This swelling is most marked on the face, and, added to that already produced by the eruption, it may close the eyelids, and cause a most hideous alteration in the features. On the eighth day from the appearance of the eruption, the pustules burst, and dry up into scabs—the point of bursting being previously indicated by the appearance of a black dot—or else the pustules shrink, and dry up into scabs without bursting. At the same time, a disagreeable and offensive odour is given out, which is quite characteristic of small-pox, and the patient is much distressed by itching—so distressed, that the risk of producing permanent scars is not sufficient to prevent him from scratching.

The scabs resulting from the pustules fall off in about three days, and leave the skin covered by purplish stains, which are very slow to disappear, or else marked by permanent depressed scars.

In a word, the typical eruption of small-pox is papular for two days, vesicular for three days, pustular for three days, and scabby for three days.

Being two days later in making its appearance upon the legs than it is upon the face, the eruption is two days later in coming to maturity; and hence the face is ordinarily covered with scabs, before the eruption on the legs has come to maturity. But there are many irregularities in these matters; thus, in the confluent variety of the disease, the eruption may tend to anticipate the ordinary time of its appearance, and to abbreviate the time which it ordinarily takes in overspreading the body.

During the time the eruption is being developed in the skin, a similar eruption is spreading over the mucous membrane of the mouth, throat, air-passages, and alimentary canal, and giving rise to ptyalism, soreness of throat, painful deglutition, hoarseness, difficulty of breathing, diarrhœa, &c. At any rate, the mucous membrane is thus affected in cases where the eruption on the skin is copious.

When the pustules are few and separate, as in the discreet variety of the disease—*variola*

discreta, the fever generally ceases when the eruption makes its appearance, and the patient remains free from fever until the eighth day after the appearance of the eruption, when there is a return of fever—the *fever of maturation*. When the pustules are numerous and confluent, as in *variola confluens*, there is only remission of the febrile symptoms (and this not very marked) when the eruption comes out, and the fever of maturation, which on the eighth day is superadded to the fever which has continued throughout, is particularly severe, so severe that death happens on this day in no small proportion of the fatal cases. The fever of maturation, or secondary fever, is symptomatic of the erysipelatous inflammation, which extends on this day to the areolar tissue underlying the skin and mucous membrane, and it has all the dangers belonging to diffuse erysipelas—dangers of low fever, of suffocation from tumefaction of the pharynx and air-passages, of phlebitis, of extensive abscesses, and so on. Confluent small-pox, indeed, is a very dangerous malady, and the danger of the disease is directly in proportion to the number of the pustules.

In addition to the discreet and confluent varieties which have been mentioned, small-pox may occur in a malignant, modified, and inoculated form, and in all these forms it presents differences which are of some importance.

In the malignant form, *V. maligna*, typhoid symptoms predominate, and instead of properly formed pustules, we may have flat purple vesicles, filled with bloody sanies, and intermingled with petechiæ and vibices.

Modified small-pox, or *varioloid disease*, is the small-pox which occurs now and then in persons whose constitutions have been modified by vaccination, or by a previous attack of small-pox. In this form of the disease the eruption is scanty and imperfect—generally arrested in the vesicular stage, sometimes stopping short in the papular; the antecedent and accompanying fever is very trifling; and the secondary fever, or fever of maturation, is entirely absent. Varioloid disease is sometimes called *chicken-pox* by those who look upon variella as a modification of variola, or who wish to prevent the alarm which might arise from using the term small-pox; but, as we have already pointed out (v. p. 120), there is

every reason to regard small-pox and chicken-pox as perfectly distinct diseases.

Inoculated small-pox is also, as a rule, much milder than small-pox contracted in the ordinary way by contagion. As a proof of this, Dr. Gregory relates a striking instance, in which small-pox broke out at sea in a man-of-war. The crew was, almost to a man, unprotected by vaccination, or by a previous attack of small-pox, and no vaccine matter was to be had. Sixteen of the men took the disease in the ordinary way, and nine died. The surgeon then wisely inoculated the remainder—363 in number, and of these not one died. The same thing is also told statistically: thus, the mortality of natural small-pox, according to Mr. Marson of the London Small-pox Hospital, is 33 per cent.; the mortality of inoculated small-pox, according to Dr. Gregory, is 33 per cent. All honour then to Lady Mary Wortley Montague; for it was no small service which she did, when she introduced into the West the Eastern practice of disarming small-pox of some of its terrors by inoculation!

In the popular stage, variola may be mistaken for measles and febrile lichen; in the vesicular

stage, perhaps, for varicella. The papulæ of variola are firmer, harder, more granular than those of measles. In small-pox the preliminary fever continues for two days; in measles, for three days. In small-pox the preliminary fever is attended at its onset with severe pains in the back and loins (which pains, according to Chomel, are characteristic of small-pox); in measles the predominant symptoms are those of coryza and catarrh. In febrile lichen the appearance of the eruption is very similar to that which belongs to an early period of the papular stage of small-pox; but the preliminary fever is comparatively slight, and the eruption generally comes out within twenty-four hours from the occurrence of rigors, and almost simultaneously all over the body. The vesicles of varicella are non-umbilicated; those of variola are umbilicated. Varicella, moreover, is a trifling affection, so far as the preceding and attendant fever is concerned, and it is neither contagious nor inoculable.

In its simple form, occasional spongings with tepid water, a cool well-ventilated room, and a cooling regimen, is the only treatment required until the secondary fever sets in;

and then, probably, in addition to this, a little opium will be required to relieve restlessness and sleeplessness, and to make the patient indifferent to the troublesome itching which harasses him. In the confluent form the treatment must be conducted upon the same general principles; but great care and judgment will be required in the management of the secondary fever. This fever, apparently, may be regarded as symptomatic of erysipelas, and the principles to be had in view in treating erysipelas are applicable to it. The tendency is to exhaustion, and the chief danger is from exhaustion. All depressing measures are ill borne, and wine and nourishing diet are soon required; and it is a question, whether by disregarding feverishness, and supplying food with greater boldness and promptness, and giving suitable tonics, the tendency to suppuration might not be kept more in check, and the dangers of the secondary fever lessened. Opium is a necessary remedy in the secondary fever of confluent small-pox.

Vaccination has been proposed as a remedy for modifying an attack of small-pox after its actual commencement. Eichhorn, who pro-

posed this plan, introduced the vaccine matter, by from forty to fifty incisions, and his report of the result is very favorable.

In the treatment of small-pox a very important object is to prevent the face from becoming scarred, and, in order to this, many plans have been proposed to arrest the development of the pustule.

It was a frequent practice among the Arabian physicians to puncture the pustule, and to evacuate the matter by gentle pressure ; and, in the present day, there are many who prefer this plan to any other. There are, however, other plans which aim at preventing the formation of the pustule, by arresting the eruption in an earlier stage ; and of these ectrotic (*ἐκτιτρώσκειν*, to render abortive) plans, the application of nitrate of silver, or mercurial ointment, or sulphur ointment, are most deserving of confidence.

Mr. Higginbottom, of Nottingham, recommends the application of a solution of nitrate of silver, containing from fifteen to twenty grains to the ounce of water ; and this plan is more easily carried out, and not less effectual, than that of puncturing each vesicle, and inserting

a fine point of solid nitrate of silver through the opening.

The mercurial ectrotic treatment was suggested by Professor Serres, and first brought prominently into notice by Sir Joseph Oliffe, of Paris. A most convenient mode of carrying it out is in the form of ointment recommended by Professor Hughes Bennett, of Edinburgh—one ounce of strong mercurial ointment, mixed with one drachm of powdered starch. Applied at an early period, the eruption is prevented from passing into the pustular stage, and the troublesome itching is almost entirely done away with; applied at a later period, after the pustules are formed, the effect upon the eruption is not very marked, but even then it diminishes not a little the swelling of the skin, and the annoying itching, so far as we have had an opportunity of judging; indeed, mercurial ointment affords a very effectual means of preventing pitting upon the face—a more effectual means than nitrate of silver; and we do not know of any disadvantages to be set against these advantages; for the danger of salivation, which was once urged as a disadvantage, is now allowed to be a matter of theory, and not of practice.

We have no experience of sulphur ointment as an ectrotic; but the fact that little is now said about it, may be taken as an argument that it has not answered the expectation once entertained respecting it.

Collodion varnish is, without doubt, a very important application in small-pox, as in many other eruptive maladies; it prevents the pustules attaining their full size, and it keeps down the swelling of the skin and itching, and doing this, it greatly lessens the chance of sears; but it is not ectrotic in the same sense as mercurial ointment. It is, indeed, only ectrotic by excluding the action of the atmospheric air.

The influence of vaccination in preventing small-pox will be considered under the head of *Vaccinia*.

2. VACCINIA.

SYN. Cow-pox. *Fr.* Vaccine. *Germ.* Kuhpocken, Schutzblattern.

The eruption of cow-pox produced by vaccination, that is, by the direct application of the vaccine virus to a wound in the skin, is very similar to the eruption of small-pox. Indeed, as we shall see presently, the vaccine eruption is a form of small-pox, deriving its origin from the small-pox of the cow.

During the first three days after vaccination, the wound where the virus was introduced presents nothing remarkable. This is the period of incubation. On the fourth day, a slightly elevated, hard pimple makes its appearance, surrounded by a trifling flush of redness. On the fifth day, this pimple changes into a small umbilicated vesicle; on the sixth, seventh, and eighth days, this vesicle increases in size; and, towards the end of this period, an inflammatory areola begins to make its appearance. On the ninth day, the umbilicated character is lost, by the giving way of the *bride* to which it was due, the vesicle is transformed into a pustule, the inflammatory areola extends, and a slight degree of constitutional disturbance is set up. During the tenth and the eleventh days, the pustule increases in size, the inflammatory areola extends, and any feverishness, if there be any, increases. During the twelfth, thirteenth, and fourteenth days, the pustule bursts and dries up into a brownish, irregular crust or scab, or else dries up into a crust or scab without bursting. In the course of the week or ten days following, the crust or scab falls off, and leaves a permanent cicatrix, the bottom of which is marked by numerous small pits or

foveolæ. This permanent foveolated cicatrix is characteristic of successful vaccination.

This is the usual course of the eruption produced by vaccination. Usually, that is to say, the symptoms are entirely local and restricted to the wound or wounds where the virus was introduced; but sometimes there is more febrile disturbance, and sometimes, though rarely, an herpetic eruption may overspread contemporaneously a considerable portion of the body, and sometimes the inflammation may extend to the subcutaneous tissues of the arm and cause considerable swelling or abscess. This latter accident must generally be attributed to some fault in the constitution of the child, probably to the vaccination having been performed at an improper time. It is to be remembered, also, that the course of the eruption is never so regular in the adult as in the child, and that the local inflammation and febrile disturbance is generally greater in the adult.

Cow-pox is a somewhat uncommon eruption on the skin of cattle, chiefly confined to the udders of milch-cows, spreading by contagion, characterised by the successive development of pimples, umbilicated vesicles, non-umbilicated pustules, hard brown scabs, and deep and per-

manent cicatrices, and attended by fever, which fever is rekindled into "secondary fever" when the pustules are matured. Cow-pox is also transmissible by contagion to the hands of the persons employed in milking the diseased cows, and the transmitted disease is often severe, and attended not only with considerable febrile disturbance, but with subcutaneous sloughing, and with inflamed vessels and glands.

Dr. Jenner was led to his grand discovery of vaccination as a means of preventing small-pox by a knowledge of the popular belief in the Gloucester dairy-farms, that persons who had contracted cow-pox by milking were thereby rendered proof against the contagion of small-pox. After ascertaining the correctness of this popular belief, by finding that persons who had contracted cow-pox in this manner were, as a rule, incapable of receiving small-pox by inoculation, Dr. Jenner set himself to inquire whether persons could be made equally proof against small-pox by the artificial production of cow-pox. His first case of vaccination was performed on May 14th, 1796, upon a boy of eight years old, James Phipps by name, with virus taken from the hand of a milk-maid, called

Sarah Nelmes, who had caught cow-pox in the ordinary way. On the 1st of July following, this boy was inoculated in several places with small-pox matter, without receiving the disease. This was the beginning of vaccination, and this boy, James Phipps, has the distinction of being the source from which proceeds the vaccine matter used in vaccination ever since.

Speculating upon the nature and origin of small-pox, Dr. Jenner was at first disposed to think that this disease had its origin in an affection of the heels of horses, called "the grease;" for he found that the two diseases prevailed together, and that the cows chiefly affected were those which had been milked by persons who had charge of the horses. On subsequent inquiry, however, he found that cow-pox could originate independently; and that the affection of horses from which it was now and then contracted was not "the grease," which is a common vesicular affection, but an affection of which the eruption and general symptoms were perfectly analogous to cow-pox. He found, further, that there is a close analogy between cow-pox and small-pox. Thus, an epidemic of small-pox is often accompanied by

an epizootic of cow-pox ; thus, cow-pox may be produced in cows from small-pox in man, both by contagion and inoculation ; and conversely in man, an eruption similar to, if not identical with, small-pox, may be produced from cow-pox, both by contagion and inoculation. The cow-pox of vaccination, indeed, appears to be nothing more than an extremely mild form of small-pox—milder than any other ; a form in which the eruption is limited to a single pustule, and of which the intensity is insufficient to allow of propagation by contagion.

Under ordinary circumstances, the pustule produced by vaccination is equivalent to an attack of small-pox, for by it the person vaccinated is made proof against the latter disease. There are, however, as Dr. Jenner himself well knew, exceptions to the rule. Some of the persons who took cow-pox in the natural way, from the udder of the cow, were not proof against small-pox ; and these exceptional instances are not all to be explained away by supposing that a spurious cow-pox had been communicated from the animal. It is certain, also, that the disease communicated by small-pox in its pustular stage, though often much more severe, both in its local and general

symptoms, is not equally preservative against small-pox, as cow-pox communicated in its vesicular stage. It is also certain that small-pox may occur a second time in the same person, and prove fatal. Therefore, it is no valid objection to the efficacy of cow-pox, as preservative against small-pox, that the latter affection may now and then occur after vaccination. In a word, it may be regarded as an established fact that small-pox scarcely ever occurs after vaccination, if the poek have gone through the regular stages which have been described, and that the poek resulting from effectual vaccination is equivalent, so far as protection from small-pox is concerned, to an attack of small-pox or to small-pox communicated by inoculation. Hence vaccination ought to supersede inoculation ; for though the small-pox produced by inoculation is, as we have already seen, very mild as compared with small-pox contracted in the ordinary way, it is never so mild as to be incapable of propagating the disease by contagion to unprotected persons. Hence, inoculated small-pox, though attended with little danger to the person inoculated, is a source of danger to all around.

In order to effectual vaccination, the lymph

must be taken at the proper time from the proper vesicle; it must be taken, that is, on the eighth day after vaccination, from a vesicle which up to this time has passed through the regular stages described. If the lymph has become purulent, it is unfit for vaccination; it may produce more active local and general symptoms, but it does not protect the system, like the proper lymph, from the danger of small-pox. In order to ascertain whether or not vaccination is being effectual, Dr. Boyce, of Edinburgh, proposes to perform a second vaccination four or five days after the first; for he finds that the pox produced by the second operation hurries through its stages so as to arrive at its acme at the same time as the pox produced by the first operation, if the system is being properly affected by this first operation, the only difference between the two poxes being, that the later one is smaller, and its areola less extensive. At a later period, the impossibility of communicating cow-pox or small-pox by vaccination or inoculation will show clearly that vaccination has succeeded.

A good deal of controversy has taken place as to the necessity or non-necessity of re-vaccination. Mr. E. Wilson recommends re-

vaccination every five, seven, or ten years ; and rather than run any risk, it is, perhaps, more prudent to repeat so trivial an operation. Before re-vaccination was adopted as a rule in Prussia, deaths from small-pox in persons previously vaccinated were by no means uncommon, the annual average, according to Mr. Simon, being 104 ; since re-vaccination has been the rule, the annual average has fallen as low as two. It is probable, also, that much good would result from the use of a supply of new lymph, for it is not unlikely that that now in use may have been deteriorated from a want of sufficient care in collecting it from the right poek at the right time.

It is an interesting question whether the virus obtained from other pustular affections has a power of protecting the system against small-pox. In a foot-note, Mr. E. Wilson refers to a paper by Dr. Liechtenstein in 'Hufeland's Journal' for 1841, in which it is stated that inoculation with lymph obtained from the pustules produced by tartarized antimony will give rise to vesicles and pustules which cannot be distinguished from cow-pox or small-pox, and that thirty-one persons so

inoculated escaped small-pox under very dangerous circumstances during an epidemic of this disease. Credat Judæus!

3. IMPETIGO.

SYN. Humid or Crusted Tetter. *Fr.* Impétigo. *Germ.*
Ansprung, nässender Grund.

The pustules of impetigo are of small size, very little raised above the surface, and of very short duration. They begin with scalding pain and intolerable itching, but with very little inflammation of the affected portion of the skin; they end, at the most, within three days, in a free discharge of an ichorous, stinking fluid, which dries quickly, and forms a thick, soft, yellowish, stinking crust. For some time—two, three, or four weeks—there is a continual oozing of this ichorous fluid, and the crust into which the fluid dries up goes on increasing in thickness; at the end of this time the crusts fall off irregularly, and the skin under these is found to be shining, tender, red, often roughened, and chapped, and very apt again to break out into eruption. The crusts have been likened to the conerete

gummy exudations on a cherry-tree, or to candied honey, but the stinking odour which proceeds from them—an odour having a not very distant resemblance to valerianic acid, or that of the urine of cats—is incompatible with an idea so cleanly. The most prominent feature of impetigo, as the popular name of *humid tetter* (common to impetigo and eczema) implies, is a free and continuing oozing of discharge.

The pustules and scabs of impetigo may be clustered together in variously formed patches, as in *I. figurata*, or they may be scattered, as in *I. sparsa*. Impetigo figurata, which is the most common form, is sometimes called *porrigo favosa*, *porrigo larvalis*, but these names ought never to be used, for porrigo is a totally distinct affection from impetigo. The names *mellitagra*, *honey-sickness*, *honey-scab*, or *crusta lactea*, are sometimes given to impetigo.

The smallness of the pustules, the continuing copious viscous, stinking discharge, and the thick, stinking, dried, honey-like scabs are the characteristics of impetigo. In *eczema impetiginodes*, the distinctions are sometimes broken down between eczema and impetigo, but usually we may find, on searching, some of the cha-

racteristic vesicles of eczema, and the scabs are always thin and lamellated, as compared to those of impetigo. It is possible, also, to confound impetigo, when it is going off, and when the skin is red, tender, shining, perhaps chapped, and without its characteristic crusts, with psoriasis, but in psoriasis we may always find the characteristic dry squamæ, consisting of exfoliations of morbid cuticle, which are entirely different from the scabs of impetigo. Between impetigo and the other pustular eruptions the distinctions are always sufficiently marked. Impetigo is not contagious.

A wholesome and nutritious diet is generally the prime requisite in the treatment of impetiginous affections, and the medicines most commonly wanted are of a tonic character, especially steel in one or other of its forms, and cod-liver oil. The syrup of the iodide of iron is of great value where an alterative is required in addition to a tonic; and occasionally a mild mercurial may be required during the inflammatory or febrile stage. As a local application, the benzoated oxide of zinc ointment appears to be as good as any other; and, as a rule, ointments are far preferable to any watery applications.

4. EETHYMA.

SYN. Papulous Scall. *Fr.* Dartre crustacée. *Germ.* Erbsenblattern.

The pustules of eethyma vary in size from that of a pea to that of a shilling; they are distinct, or arranged in irregular clusters; they are seated upon a hard, raised, inflamed base; and they end in the formation of thick, brown scabs. There may be a good deal of local pain, and some feverishness, if the eruption be generally distributed over the body; but usually the local and general disturbance is little marked, and the pustules form slowly, and continue to come out almost indefinitely. The scabs fall off in from eight to ten days, and leave behind them livid marks, which are slow to die out, or else superficial cicatrices which may be permanent. Eethyma is not contagious.

Eethyma is usually divided into acute and chronic. Acute eethyma has some affinities to an eruption of boils, the larger pustules being, in fact, small boils; and, as in an eruption of boils, there may be a fair amount of febrile disturbance. Chronic eethyma, in its most

marked form, *E. cachecticum*, approaches very closely to the characters of rupia. Generally, however, the pustule of ecthyma differs from a boil in the direction of the inflammation. In ecthyma, the inflammation begins superficially, and extends afterwards to the deeper parts; in the boil, the inflammation begins in a portion of the subcutaneous cellular tissue, and progresses to the surface. Rupia is distinguished by the absence of true inflammation, and true pus, by the predominance of ulceration, and by the limpet-shell-like scabs; but in many cases of ecthyma cachecticum ulceration predominates over inflammation, and the scabs are very large and ugly. The distinctions, indeed, are not very marked.

Ecthyma is essentially a disease of debility, and the treatment must consist in counteracting this state, as far as possible, by good and sufficient food and stimulants, by saving the strength in every way, and by attending to hygienic rules generally. As medicine, nitromuriatic acid and bitters, or cod-liver oil, are likely to prove most serviceable; as local applications, opiated poultices or water-dressings,

when there is much local inflammation; and benzoated oxide of zinc ointment afterwards, will probably do all that is required.

When ecchyma is produced by some local cause of irritation, as by sugar or lime, this cause must of course be met as far as possible.

CHAPTER VI

SQUAMOSÆ.

SQUAMÆ, or scales, are formed wholly or in part by morbidly altered searf-skin, the scales varying from simple loose scurf, to hard, thiek, firmly fixed seabs or plates. In this group are—

Psoriasis,
Lepra,
Pityriasis,
Pellagra,
Iehthyosis,
Elephantiasis Arabica.

And here may be placed on one side—

Veruea,
Tylosis,
Horus.

1. PSORIASIS.

SYN. Dry Tetter, Dry Scall. *Germ.* ~~Reinaussatz~~.

Psoriasis is characterised by white and silvery scales upon irregular patches of inflamed, furrowed and usually chapped skin. The scales, which are produced by exfoliation of the scarf-skin, are continually being produced in great abundance, and as continually shed. *The patches are always irregular in form*—this, indeed, is the chief distinction between psoriasis and the kindred affection, lepra. The furrows are the natural furrows of the epidermis, only deepened. The chaps may take place in any direction; they readily form under any slight strain, for the affected portion of the skin has become brittle, and devoid of its natural elasticity; they now and then bleed, but they do not frequently pour out serum, or any other secretion in any quantity. Psoriasis is not contagious.

Psoriasis is usually developed slowly and insidiously, with no more marked local symptoms than a little tenderness and itching, and without any febrile or constitutional symptoms.

In *Psoriasis vulgaris* the patches are generally of large size; in *P. guttata*, the place of the patches is occupied by small spots. In each case, the patches or spots may be on any part of the body, or upon almost every part of the body at the same time. *P. inveterata* is the name given to the most obstinate and inveterate form of the disease. One variety has been called *P. gyrata*, but this ought more properly to be passed over to lepra; for *regularity of form*, as we shall soon see, is the chief artificial distinction between lepra and psoriasis. Other names, as *P. palpebrarum*, *P. labialis*, *P. præputii*, *P. pudendalis*, *P. scrotalis*, *P. palmaris*, &c., indicate simply the locality affected. The latter variety is a common condition in grocers, bakers, dyers, masons, washerwomen, &c.

Cases of chronic eczema and *lichen agrius* are not unfrequently met with, in which it is by no means easy to draw the line of distinction between them and psoriasis; and this difficulty is increased by the fact, that in certain cases psoriasis may become blended with an unusual amount of erythematous congestion, and losing the want of moisture and dis-

charge, which is a prominent characteristic, it may pour out for a time either as freely as an eczematous affection.

Psoriasis is notoriously difficult of cure, and yet there is one remedy—arsenic, which may almost be looked upon as a specific. In order to the successful action of this medicine, however, there are many circumstances to be attended to. Generally, there is some constitutional debility which requires an improved and corrected and more stimulating diet, with bitters and acids, or some other appropriate tonics; sometimes there is, for a time, a gouty diathesis, which must be considered; sometimes a special disorder must be combated—in a word, we must seek to re-establish the general health irrespective of the condition of the skin, and, in proportion as this is done, we may expect arsenic to act beneficially. Five minims of Fowler's solution, or four, three, or two minims, according to the case, immediately after a meal, twice a day, is sure to make a favorable impression upon the disease in time, and to produce no dyspeptic symptoms if proper care be taken to give a small dose patiently on a full stomach. The re-

sult of giving mercury and its compounds, or iodine and its compounds, are by no means so satisfactory as the results of giving simple arsenic (of this the majority of practical men seem to be agreed), and this would seem to be an objection to the opinion that psoriasis is a manifestation of the syphilitic poison. In some cases, indeed, mercury and iodine would seem to do material harm. Nor can decoctions of guaiacum, sassafras, dulcamara, meazeron, galium aparine, &c., be looked upon in any other light than as possible adjuvants. In a word, arsenic is the only medicine upon which any confidence can be placed.

The local treatment of psoriasis is simply palliative—frequent baths of tepid water or vapour-baths are undoubtedly of much service, and ointment of white precipitate, or oxide of zinc, may do good in many cases. We think, however, that we have seen more good from the application of the following arseniated ointment; and this is not at all improbable, for if arsenic given internally acts so beneficially, it is to be expected that the direct local application of the same remedy will do some good.

R Liq. Potassæ Arsenitis, ʒij ;
 Ung. Cetacei, ʒxiv ;
 Ol. Lavandulæ, ʒxv.
 Tere simul.

2. LEPRA.

SYN. Scaly Leprosy, Leprous Scall. *Fr.* Lèpre.
Germ. Aussatz.

Lepra may be looked upon as psoriasis occurring in *patches of a regular form*—psoriasis growing excentrically after the manner of a ringworm. After a time the patches of lepra present a depressed centre, or rather a centre of the natural level of the skin, surrounded by an elevated border, and this is the necessary consequence of the mode of growth; for as the disease extends excentrically, the centre heals, and, healing, the somewhat puffy and raised condition of the skin which previously existed there when the disease extended no further, passes off. Lepra rarely presents the chapped condition which is so generally present in psoriasis; it represents, indeed, an earlier phase of the disorder.

In certain stages *lichen circumscriptus* may

be very like lepra, so far as form is concerned ; but the presence here and there of a typical pimple, and the absence of the white and silvery scales of lepra, will enable us easily to identify the lichenous affection. When seated in the scalp, also, lepra may possibly be mistaken for certain varieties of porrigo ; but the destruction of the hair in porrigo, and the probable presence of other leprous patches in other parts of the body besides the scalp, will at once guide us to a correct diagnosis.

Lepra is more amenable to treatment than psoriasis.

3. PITYRIASIS.

SYN. Dandriff. *Germ.* Kleingrund, Hautklee.

Pityriasis (πίτυρον, meal) is characterised by the copious production of loose mealy scurf upon a congested and itching skin. Where the affection is of long standing, the skin may become somewhat thickened and puffy, and the surface abraded by scratches, and altered by the addition of the scabs which cover these abrasions, but the skin is not thickened, and

brittle, and chapped, as it is in psoriasis. Itching, however, is a more prominent and annoying symptom in pityriasis than in psoriasis.

The most remarkable varieties of pityriasis are those in which there is discoloration of the scurfy portion of the skin—*P. versicolor*, and *P. nigra*; the other varieties refer merely to the locality affected—*P. capitis* (*dandriff*), *P. palpebrarum*, *P. labialis*, *P. palmaris*, *P. plantaris*, *P. præputialis*, &c. The discoloration in the variegated and black varieties appears to be due generally to abnormal secretion of the natural colouring elements of the skin. In *P. rubra* there is an unusual degree of erythema.

The treatment of pityriasis is the treatment of erythema. It is especially necessary not to irritate the affected part; in *P. capitis*, in children, it is often enough to leave off the practice of using a fine toothcomb.

4. PELLAGRA.

SYN. Lombard Evil. *Ital.* Mal del sole, mal rosso.

Pellagra is characterised by a congested, thickened, sealy, excoriated, and chapped state

of those parts of the skin which are exposed to the light and air—a state which may be said to be an aggravated form of psoriasis; but the eutaneous affection is but a small part of the malady. A state of ill health not remotely akin to scurvy, and a state of mental inaction beginning in moping, and ending often in fatuousness, are indeed the more prominent characteristics of this disease. Pellagra is almost always fatal, if left to itself—fatal in from four to five years.

As was shown in the introduction, the circumstances in which pellagra originates are very similar to those which gave birth to the leprosy of the middle ages; and there is reason to believe that pellagra is a form of leprosy, if the term leprosy be used in the same wide sense as that in which it was used by the Jewish lawgiver.

The remedies for pellagra will be the same as those which apply to aggravated cases of psoriasis, and to the other forms of leprosy.

5. ICHTHYOSIS.

SYN. Fish-skin disease. *Germ.* *Fischschuppen-ausschlag.*

In this affection, the skin is sallow, dry, and

covered with dense polygonal scales or spines, and the subcutaneous cellular tissue is somewhat thickened. The term fish-skin-disease aptly expresses the shagreen-like appearance of the skin. Ichthyosis is a perfectly chronic disease, generally hereditary, affecting the parts in which the skin is naturally thick, and the epidermis rough, and attended at no time by pruritus, heat, or any other symptom of inflammatory action. Under the diseased covering, indeed, as may be seen now and then, when this covering peels off, the skin would seem to be, to all appearance, in a natural state.

Two varieties of ichthyosis are described—*I. squamosa*, and *I. spinosa*. In the case of *I. spinosa*, the spines are sometimes developed to such an extraordinary degree as to bear no distant resemblance to those of a porcupine. The well-known case of the "Porcupine Boy" is an instance in point. The scales of the scaly variety may also be developed so as to resemble the thick plates of an alligator, in which case Mr. Wilson's name, *sauriderma*, is not inappropriate.

Mr. Wilson has shown, very satisfactorily,

that the scales and spines of ichthyosis are formed of conereted and altered sebaceous substance, and not hyperformation of cuticle resulting from an enlarged and over-active state of the papillæ of the true skin, as was once supposed. He places it under the head of *xeroderma* (ξηρὸς, dry), a state arising, as he thinks, from diminished function of the sebaceous glands, and marked by disagreeable dryness and harshness of the skin, with its usual accompaniments, cracking and desquamation of the cuticle.

The treatment of ichthyosis must be conducted upon the same general principles as that of psoriasis; cod-liver oil and arsenic being the most trustworthy remedies. The local treatment must first be directed to the removal of the scales or spines, and, in order to this, frequent alkaline baths and inunctions must be employed. The next thing is to provoke a more healthy action of skin by frequent baths and by assiduous friction, and, in order to this, baths of plain water, and friction with a rough towel, or with the hand, are generally as effectual as any other means. In some cases, however, some stimu-

lating ointment, or embrocation of iodine, may be necessary for a while. Ichthyosis, in its ordinary form, yields pretty readily to treatment.

6. ELEPHANTIASIS ARABUM.

SYN. Barbadoes Leg, Elephant Leg. *Fr.* Mal des Barbades. *Germ.* Elephantenaussatz.

In this disease, the skin of the affected part is usually of a dirty or livid hue; and often it is fissured, or rugose, or sealy, as in ichthyosis. The most remarkable feature, however, is the great tumefaction and hardness of the subcutaneous structures, and the absence of that pitting under pressure, which is met with in cases of ordinary dropsical enlargement. The disease is generally confined to one of the legs (hence one of its names, Barbadoes leg), and it never extends beyond the other leg or the serotum. The deformity produced is extraordinary; thus, the leg may be literally like that of an elephant, both in size and form, and the serotum may be an immense mass weighing as much as eighty pounds.

The disease is developed in connexion with repeated bouts of local inflammation and ob-

struction of the veins and lymphatics of the affected part, accompanied by sharp fever; and each time the hardness and tumefaction produced remain. This tumefaction and hardness are produced by thickening of the true dermis and subcutaneous tissue, and by the interstitial deposition and inspissation of lymph. A few months or several years may be occupied in bringing about the full development of the disease.

The treatment must be conducted upon the same general principles as that of ichthyosis, but the frictions and shampooing must be conducted with more care, for fear of provoking renewed inflammation of the veins and lymphatics. It must be confessed, however, that treatment is very unsatisfactory, and that the aid of the surgeon is generally required in the end to remove the unsightly organ.

Under the head of Squamosæ, more conveniently than elsewhere, as we have already said, may be placed human horns, corns, and warts.

1. *Human Horns*.—Between cases of ich-

thyosis spinosa, such as that of the "porcupine boy," and cases of human horns there is a very close connexion. The horn indeed, may be said to be ichthyosis spinosa confined to one spot, and concentrating its strength in producing one large horn in place of many horny spines. The form, size, and seat of these unnatural growths are very variable; the structure and mode of production would seem to be very similar to that of the spines of ichthyosis. The treatment is to take advantage of the time when the horn falls off (for, like the scales and spines of ichthyosis, it is shed at certain times, almost periodically), or to procure its detachment by producing inflammatory action around its base, as by the application of a streak of blistering plaster; and then to completely destroy the diseased surface, by the application of some form of caustic.

Corns.—These troublesome companions are pads of thickened epidermis, arising from undue pressure and friction of the part. This pressure and friction give rise to a congested, inflamed, and hypertrophied state of the papillæ

of the true skin, and the secretion of the epidermis in increased quantity is the secondary result. Hence, in a newly formed corn, there is a congested, inflamed, and hypertrophied state of the papillæ of the true skin under the cap of thickened epidermis. In an old corn it is different; for there the pressure of the cap of thickened epidermis has produced an atrophied state of the subjacent papillary structure, and, instead of being a cap covering a prominence, the pad of epidermis is now rather a ball filling a hollow. This ball is the "corn," which the chiropodist professes to remove. Sometimes the pressure of the corn may lead to more serious mischief than the absorption of a few papillæ: thus corns may produce bunions, when over bursæ, or even inflammation of the cartilages and other structures of joints. More frequently blood is effused under the pad of epidermis, or into the tissues of the subjacent skin, under any undue amount of friction or pressure.

According to the direction of the laminæ or fibres of the epidermis forming the pad, corns are divided into *laminated corns* (*tylosis*, *callosity*) and into *fibrous corns* (*clavus*). *Soft corns*

are corns, under circumstances (as between the toes) where the pad of epidermis is prevented from hardening, by being kept in a continual bath of perspiration.

Where corns are upon the feet, properly fitting shoes or boots—shoes and boots which are neither too tight nor too loose—must be procured; and, in any case, the first desideratum must be to remove the cause of friction and pressure. The next thing is to file or pare away the corn itself, or to pick out the “corn” where there is one. In the case of a soft corn, it must be chipped off with scissors, and a small piece of cotton-wool worn between the toes, until the tenderness passes off.

3. *Warts (verrucae)* consist of an enlarged condition of the papillæ of the true skin, and a corresponding thickening of the cuticle covering these papillæ. In the majority of cases the papillæ are coherent as well as enlarged; in some cases the papillæ are more or less separate, so as to give the wart a plush-like appearance.

The usual seat of warts is on the hands, but they may appear anywhere. They are most common in children. They appear and dis-

appear, and the cause of appearing and disappearing is equally obscure.

The treatment of warts is entirely local. The best plan is to destroy the growth entirely by caustic—and a sharp caustic, like potassa fusa, is perhaps the most desirable; or the wart may be touched a few times with the tincture of the perchloride of iron. The remedies for warts are innumerable; among them are the juices of several simple plants, as the *chelidonium majus*; but potassa fusa and the tincture of iron seem to be most deserving of confidence.

CHAPTER VII.

TUBERCULÆ.

TUBERCULÆ, or tubercles, are solid elevations of the skin, larger than pimples, smaller than tumours, usually indolent in their character, and usually ending in suppuration and ulceration, or in mortification and ulceration. Here belong—

Aene,
Molluseum,
Frambæsia,
Lupus,
Cheloidca,
Lepra tuberculosa,
Spedalskhed,
Lepra Astrachanica,
Malum Alepporum.

And here may be placed, as conveniently as elsewhere, and as appropriately—

Furuncle,
Carbuncle,
Pustula maligna,
Pestis glandulosa,
Equinia glandulosa.

1. ACNE.

SYN. Whelk. *Fr.* Couperose. *Germ.* Hautfinne.

The tubercles of acne are of small size, conical and detached, hard and red. They are essentially indolent in their character. In the majority, a small quantity of matter forms slowly at their summits, without any local pain or heat, and this matter is very slow to escape; in a few, no matter is ever formed. In either case the tubercles, or their remains, are very slow to disappear. Acne is unattended by feverishness or any constitutional disturbance; it is commonest about puberty; its name is derived from *ἄκνη* or *ἀκμή* (*maturitas*, vigour).

When examined closely, the tubercles of acne are often found to be connected with the

sebaceous glands of the skin ; often they would seem to have their point of origin in inflammation of these glands or of their ducts, and very frequently the purulent matter found in them is mixed with sebaceous matter. Along with acne, the sebaceous glands are always more or less altered in several places, their ducts distended with thickened matter, and their openings appearing as blackened points. Indeed, acne is invariably attended by these blackened points, and by a sordid and discoloured state of the skin, which seems also to be connected with some disordered state of the sebaceous system. Still there are many tubercles of acne which cannot readily be looked upon as having their origin in an altered and diseased sebaceous follicle. The face and shoulders are the favorite seats of acne ; the limbs, curiously, are never attacked.

In addition to the typical form, which is called *acne simplex*, the principal varieties are *A. punctata*, *A. indurata*, *A. rosacea*, and *Mentagra* or *Sycosis*.

A. punctata is the name given to the simple pimples, surmounted by a black point, which are formed by the distension of sebaceous

glands and ducts by viseid sebaceous matter, the black point being this matter projecting somewhat from the opening of the duct, and dirtied by exposure. On squeezing these pimples, the viscid contents are forced out in the well-known worm- or maggot-like form ; hence their name, *maggot-pimples*.

In *A. indurata* (*stone-pock*), deep-set, indolent, livid hardness is the characteristic feature of the pock ; and when the face is the part affected, the features may be distorted in a very unseemly manner, from the size of the tubercles, and from the way in which the subcutaneous cellular tissue is implicated. In some very severe cases, the disease would almost seem to be transitional to *lepra tuberculosa*.

A. rosacea is, in a sense, intermediate between *A. simplex* and *A. indurata*. Its most prominent characteristic is shining redness and thickening of the affected skin, without any great prominence of the tubercles. This species commonly appears first at the end of the nose, and thence extends to the rest of the face, the shining surface acquiring an irregular nodulated appearance, as the tubercles of æne become a more prominent feature in the

affection. Bardolf's nose, which was likened to Althæa's firebrand, and the red proboscises now and then met with in old toppers and others, are instances of this affection.

Sycosis, or *mentagra*, is aene developed in the region of the beard, whiskers, or eyebrows. This variety is attended with more local heat and irritation, and with a greater disposition to suppuration, in consequence apparently of the irritation produced by shaving and brushing. Falling off of the hair is now and then a consequence of sycosis; but it is an error to suppose, as has been done by several writers, that sycosis is a porriginous affection. A cryptogamic plant, called *mentagraphyte*, and analogous to that which is met with in porrigo, has been said to exist in some forms of sycosis, and these forms, moreover, have been represented as contagious; but these observations are contradicted by later and more careful inquiries.

Aene may be regarded as a transitional form between pustular and tubercular affections of the skin; but the characters of aene are certainly much nearer to those of the latter class. Thus, the hardened base always predominates

over the small collection of matter in their summits; and, as another distinction from pustules, it may be mentioned that there is no tendency to the formation of marked crusts or scabs in acne. Thin scabs, or simple exfoliation of the cuticle, indeed, take the place of crusts and scabs. These characteristics are sufficient to distinguish acne from the chronic pustular affections, ecthyma and impetigo. In some cases, *acne rosacea* may be mistaken for incipient lupus; but here again there are means of distinction, of which we have to speak presently.

Acne is a very obstinate affection, and its several varieties may require a very different plan of treatment. It may be doubted whether there are any cases in which a low diet is called for. *Acne rosacea* is very properly regarded as a consequence of spirit-drinking in excess; but as it is certainly no consequence of the free drinking of malt liquors or wine, it does not follow that stimulants of a proper kind, and in proper quantity, are not indicated. As a rule, indeed, a good well-regulated diet, in which wine or malt liquor is not omitted, is essential to the proper management of acne.

In any case of aene, regular bathing and shampooing will be of undoubted service; and in some cases, good will arise from a course of sulphurous waters, like those of Harrogate. In the more obstinate cases, inunctions with an ointment containing a minute quantity of liquor arsenicalis or liquor hydrargyri bichloridi will probably do much good service. Inunction, indeed, appears to be preferable to the application of any washes, stimulant or other. In the case of aene the seissors must be substituted for the razor, so long as the disease continues. A course of arsenic will probably be required in the majority of obstinate cases, before a cure can be expected.

2. MOLLUSEUM.

The tubercles of molluseum vary in size from that of a vetch to that of a pigeon's egg; they are of various forms, of slow growth, of small sensibility, and usually they continue through life without any tendency to inflammation or ulceration. Some of them are raised on peduncles; many contain a semi-fluid athematous matter, which may be squeezed out

of an orifice on their summit, and which would sometimes seem to have the property of communicating the disease to another person. Molluscum is a very rare affection, and one which still requires to be investigated carefully. It must be treated on general principles.

3. FRAMBÆSIA.

SYN. Yaws, Sibben, Pian, Epian, Syphilis Africana, Syphilis vel Lepra Ethiopica. *Germ.* Kamberrwarzensucht.

Frambæsia (*framboise*, a raspberry) is characterised by tubercles, which in form, colour, and size, are very similar to a raspberry or mulberry. These tubercles are very indolent, forming slowly and with little or no local or constitutional disturbance, and ending, for the most part, in foul ulcers and marked cicatrices. The ulcers discharge a fœtid ichor, which is undoubtedly contagious. One ulcer is usually larger and fouler than the rest, and this is known by the negroes (among whom, in Africa and in the Western Continent and Isles, the disease is chiefly met with) as the *mama pian*, or *mama yaw*.

Frambæsia is said to occur only once in life, and most generally in children and young persons.

It affects any part of the body ; but the face, axilla, and groins, appear to be its most favorite seat. It is said, by several careful observers, to be a form of constitutional syphilis ; by others it is looked upon as having affinities to leprosy ; and certainly it makes its appearance where damp dwellings, unwholesome food, filth, and misery predispose to leprosy. The treatment, which appears to be very unsatisfactory, must be conducted on general principles.

4. LUPUS.

SYN. Wolf, Canker, Noli me tangere.

In their typical forms, the tubercles of lupus are livid and indolent, of various sizes, and arranged singly or in clusters, but usually in clusters. After continuing for some time in an indolent condition, they change slowly into ulcers, discharging a fœtid ichor, covered with thick dry scabs, and ending at length in the formation of unhealthy-looking or deeply-pitted cicatrices. There is no febrile disturbance at any time, and but little local pain, and the course of the disease is so slow that years may be consumed between its beginning and end.

The nose, lips, and eyelids, are most frequently attacked, and these parts may disappear entirely under the ravages of this hideous disease.

Around this typical form of the disorder to which the name of *lupus exedens* (devouring wolf) or *noli me tangere* is usually given, are ranged other varieties of the disease. The tubercular character may be almost or entirely wanting, and the tendency of the disease may be to destroy or alter the skin very superficially. In some cases the skin seems to disappear by absorption rather than by ulceration. These slighter forms are known by the name of *lupus non exedens*, and they certainly occasion less destruction of the parts, and less deformity, than *lupus exedens*; but even in *lupus non exedens*, the substance of the skin disappears, and the depressed scar, red, thin, and crossed by ridges and bands, is a hideous disfigurement. Or the tubercular character of lupus may be more marked, and instead of ulcerating, the tubercles may tend simply to increase of size. This variety is known as *L. non exedens serpiginosus*. In this latter case, some tubercles are not unfrequently met with upon

the body and extremities, as well as upon the face.

Lupus may be mistaken for serofulous disease, or for some forms of cancer. Many are disposed to regard lupus as a form of serofulous affection, and there are, no doubt, many good grounds for this opinion; but the sore of serofula differs from that of lupus in extending by the detachment of its edges from the subjacent tissues, and by the formation of sinuses. It would seem, also, that *virulent ulcers* of the integument of the face are connecting links between cancerous ulcers and those of lupus. There are, however, certain marked differences between cancer and lupus, under ordinary circumstances. The tumour of cancer is hard and single; the tubercles of lupus are soft and in clusters. Lancinating pain is a frequent accompaniment of the cancerous tumour, but not of the tubercle of lupus. The ulcers of cancer, moreover, are painful, everted at their edge, presenting for the most part a fungous appearance, and without the thick dry scabs which are characteristic of lupus.

The treatment of lupus is never very satisfactory, but it appears to be most so where the

same general rules are carried out which would be carried out in a serofulous affection,—a diet in which there is no stint of animal food and stimulants, fresh air, proper exercise, warmth, and strict attention to hygienic rules generally, with cod-liver oil and steel. The usual practice is to destroy the tubercles by some caustic, chloride of zinc or nitric acid, perhaps, and then to have recourse to a moderately stimulating ointment, such as the Peruvian balsam ointment. It may be questioned, however, whether it is not a better practice to avert ulceration where the disease has not reached this stage, and endeavour to produce absorption by pressure; but we have no experience upon this point.

5. CHELOIDEA.

SYN. *Fr.* Chéloïde. *Germ.* ~~Cheloides~~.

Cheloides (from *κηλη*, *forceps cancrorum*, from a supposed resemblance of the tumour to the foot of the crab; or more probably from *κηλις*, *macula*, *vel probrum*, the term having reference to the singularly cicatrix-like appearance of the affection) is of very rare

occurrence. Appearing, at first, as a flat indolent tubercle, one or more of which may become manifest at the same time, it extends by slow degrees into a flat, irregular, angular tumour, covered with thin, shining cuticle, and having, both in colour and shape and substance, a most extraordinary resemblance to the cicatrix of a burn. The true skin is totally disorganised. The disease is usually accompanied by a good deal of tingling, and by sharp, shooting pains; but it does not end in ulceration, and ulceration is not readily produced even by the means used to disperse the tumour. It is not at all dangerous.

The seat of the disease is usually between the mammæ; but it may occur elsewhere, and sometimes in more than one place in the same patient. It has never been observed in children. In size, the patch of *cheloidea* may vary from that of a sixpence to that of the hand.

Alibert, who described this disease first, distinguished it by the name of "canceroid;" and one reason for doing so was the analogy he supposed to exist between this malady and cancer. And certainly there would seem to be a close resemblance to cancer in some respects,

as in the root-like prolongations by which the disease extends in the deeper parts of the skin, and in the acute, smarting, lancinating pain by which cheloidea is frequently attended; but, on the other hand, cheloidea differs from cancer in many respects, and particularly in the absence of a tendency to ulcerate, and in the disposition to remain stationary, or disappear, after having arrived at a certain point. In cheloidea, moreover, the surrounding skin and the neighbouring lymphatic glands are sound, and there are none of the large and tortuous veins which usually surround a cancerous tumour.

The treatment of cheloidea is not promising. Recourse has chiefly been had to local applications; but the more rational treatment would appear to be one bearing upon the constitutional state of the patient. The internal use of arsenic seems to yield the best results, when steadily persisted in. Collodion, tincture of iodine, and an ointment of iodide of lead, are the best local applications.

6. LEPROA TUBERCULOSA.

SYN. Leprosy. Lèpra Hebræorum. Elephantia Græcorum. *Fr.* Eléphantiasis. *Germ.* Elephantenaussatz.

The tubercles of leprosy are of a shining, tawny, or brownish tint, greasy-looking, soft, and smooth, varying from the size of a pea to that of a walnut, irregular in shape, and attended by a thickened and rugous state of the skin. They are usually preceded by tawny, erythematous patches, of which the natural sensibility is greatly impaired or entirely lost, and from which, if previously present, the hair falls off. They may occur on various parts of the body, but they most frequently attack the features, and produce the most horrible deformity—"a fixed and horrible satyr-like aspect," says Guy de Chauliac, who wrote about leprosy in the fourteenth century. They do not usually extend to the hairy scalp, and, therefore, the leper does not lose the hair of his head, as the result of the disease. Like the erythematous patches which preceded them, the tubercles are usually numb and painless, but, in some instances, pain is experienced when they are handled. For a while,

often extending over years, the tubercles slowly increase, until everything human is expunged from the face ; and, contemporaneously with these changes, the sense of smell is impaired and lost and ozæna supervenes, the voice becomes husky or altered, the eyesight fails, and the sense of touch becomes strangely insensitive. The unhappy patient, also, is languid, weak, and dejected in no ordinary degree. Later still, the tubercles ulcerate, and form unhealthy sores, covered with thick scabs, and discharging a foetid ichor. Sometimes, but very rarely, these sores cicatrize ; generally, they extend continually, though slowly, and cause extensive destruction of the parts. Fingers and toes, nose and ears, may be detached in this way.

One of the symptoms of leprosy is said to be a *libido inexplicabilis*, but it is quite evident, from modern authority on the subject, that this is no constant symptom. In some cases, indeed, there is deficient venereal tendency.

There is difference of opinion as to the contagiousness of leprosy, but the generality

of modern writers agree that it is not contagious.

Death is usually brought about by inflammatory changes in the respiratory organs, or by enteritis. The lungs commonly contain crude or softened tubercle, and Peyer's and the mesenteric glands are also changed in the same way.

The description given will apply to several forms of the disease—to the Tsarath of Moses, the leprosy of the Middle Ages, elephantiasis Græcorum, the spedalkshed of Norway, lepra Astraehaniea, malum Alepporum, and to others; for, in all essential particulars, these several diseases are, in reality, one and the same—lepra tuberculosa.

Tubercular leprosy is most commonly regarded as a hopeless affection—one utterly beyond the remedial powers of medicine. The circumstances, however, which favour,* if they do not altogether determine, the development of the disease, clearly point out the direction in which our treatment should tend, and that this should be mainly hygienic and dietetic. Experience, also, teaches us that our chief

* See Introduction, p. 36.

hope of success depends upon our acting thus, and that such aid as we obtain from physie is rather that of giving a fillip to the vital powers which enables us to bring more effectually to bear upon the patient the curative effects of a well-conceived nutritious and somewhat stimulating diet, our attention being given to secure, as far as possible, a pure and dry atmosphere, due exercise, and the other requirements of good hygiene. The hopelessness of tubercular leprosy consists, in no small degree, in the impracticability of obtaining these requisites among the classes of persons most affected by the disease, or in the impossibility of continuing their use, if obtained, over a sufficient length of time, or in the difficulty of contending with the disease at its origin. An improved diet was alone sufficient to put an end to the development of leprosy among the slaves in the Mauritius,* when slavery existed there. The internal and external treatment of leprous tubercles must be governed by general principles.

* See Introduction, p. 41.

7. FURUNELE, CARBUNELE, AND MALIGNANT PUSTULE.

SYN.

- (1) *Furuncle*: Boil. *Fr.* Furoncle, Clou. *Germ.* Blutgeschwür.
 (2) *Carbuncle*: Anthrax. *Fr.* Charbon. *Germ.* Karbunkel.
 (3) *Malignant Pustule*. *Fr.* Pustule maligne. *Germ.*
 Brandblatter.

Furunele, carbunele, and malignant pustule may all be said to come under the head of erysipelas, inasmuch as they are erysipelas intensified locally—furunele being erysipelas phlegmonodes, carbunele and malignant pustule being erysipelas gangrenosum so intensified. The general characters of the *boil* are well known—a circumscribed, conical, hard, red, hot, and painful swelling, ending in a small slough of cellular tissue and a small collection of matter, and bursting by a single opening. In carbuncle, the inflamed spot is larger than in furunele, and the tendency is to sloughing rather than to the formation of matter, and the constitutional and local symptoms are principally low typhoid. In malignant pustule, the characters of carbuncle approximate still more closely to those of gangrenous erysipelas; there is an indefiniteness in the local symptoms,

the central part soon becomes numb, the surrounding cellular tissue puffy and œdematous, and gangrene advances rapidly; the constitutional disturbance, also, is more fatally and rapidly typhoid. The general symptoms, indeed, are very like those produced by a dissection wound, and the cause is not dissimilar, for the malignant pustule may generally be traced to infection by the morbid fluids of cattle, &c. Malignant pustule is common and very fatal in France, but almost unknown in England.

Furuncle and carbuncle interblend insensibly, and varieties are continually met with in which it is difficult to say which disease is the predominant one. There is every reason to believe that carbuncle and malignant pustule interblend in the same manner. The difference between the latter is in the cause rather than in the result.

The treatment of ordinary boil is simple, and consists in regulating the digestive organs, and rectifying the secretions. Aromatic purgatives are required to keep the bowels freely but not over-acting; and liquor potassæ in a bitter infusion, and a course of Plummer's pill,

will chiefly supply every other requirement, the diet being duly regulated and deprived of over-stimulating articles. When the eruption of boils assumes an asthenic character, which is commonly the case in large towns (indeed, in the metropolis, a lack of tone may be assumed to lie at the bottom of all furuncular eruptions), potash, or any of the alkalies, will rarely prove of service. The necessary care having been given to the regulation of the bowels, the mineral acids will, in these cases, be found to be most useful, these medicaments often exercising an almost specific effect.

The boil may be combated externally by hot fomentations or poultices, after first incising it; or an attempt may be made to curtail its extension by the application of nitrate of silver, or by slightly touching its most prominent part with a solution of bichloride of mercury in strong nitric acid.

In the external treatment of carbuncle, nitrate of silver or the solution of bichloride of mercury in nitric acid may be made use of; but the most approved plan is to divide the carbuncle freely with a crucial incision, as this, by the relief of the tension of the parts,

most certainly prevents the extension of the disease, and also facilitates the casting off of the sloughs. After making the incision, poultices, composed of linseed meal, with the addition of yeast or a little port wine, should be made use of. The internal treatment should be directed first to the regulation of the bowels and secretory organs, and subsequently to sustaining the vital powers, which are apt to flag most seriously during the progress of the disease. The former object will be secured chiefly by the occasional use of aromatic aperients; the latter by the adoption of a nutritious, readily digested diet, by the use of stimulants, particularly wine combined with spices, ammonia, camphor, or turpentine, and by means of tonics, such as cinchona, quinine, and the mineral acids. It is well for the physician to bear in mind, that his great aim should be to keep the patient alive until the carbuncle has exhausted its virulency. By the local treatment advised, he places the carbuncle in the best position for rapidly coming to an end; by the general treatment, he seeks to remove any immediate cause tending to vitiate the system, and to anti-

ciate, stave off, or keep in check the grave depression of the vital powers, of which carbuncle is almost invariably an indication. But, in effecting this latter object, the requisite steps are not to be carried out rashly and empirically. This husbanding or fillying the powers of the system, which is, perhaps, the most important point in the general treatment, is also the one requiring most judgment. We must know when to hold our hand, when to push boldly forwards; when to be content with a well-arranged, nutritious diet, when to have recourse to the free use of stimulus. This knowledge is to be gained only by watching the pulse and the aspect of the patient day by day, and often several times a day.

The treatment of malignant pustule is essentially the same as that of carbuncle, with this exception, that it is almost absolutely necessary, first of all, to check the gangrenous sloughing, by the use of the actual cautery, or by the use of strong nitric acid, applied in the same fashion as in sloughing phagedæna.

8. PLAGUE.

SYN. Pestis Glandulosa. *Fr.* Peste. *Germ.* Pest.

The eruption of plague, which consists of buboes, carbuncles, pustules, and petechiæ, is attended and preceded by the most malignant and fatal fever. The fever generally sets in suddenly, without any premonitory symptoms, and frequently without the usual chills or rigors. At once, the patient is prostrated in body and mind, by a state of typhoid collapse, and seized with darting pains in the axillæ and groins, as well as in other parts of the surface. On examination, the painful parts are found to be hot and swollen; a little later, they have changed into carbuncles and buboes—buboes, if the painful parts implicate the lymphatic glands; carbuncles, if the parts implicated be the muscular or subcutaneous tissue. The colour of these swellings varies from bright red to livid purple, according to the activity of the system. The buboes and carbuncles generally make their appearance on the first day, but they may be delayed to the second, third, or even fourth day. Usually, as the

buboes and carbuncles are developed, the constitutional symptoms gain ground, those symptoms being feverish or typhoid, as the case may be, but generally typhoid, the symptoms differing but little from those of putro-adynamie fever and true typhus, except in the appearance of carbuncles and buboes. In the worst cases, and in an advanced stage of the disorder, petechiæ and vibices and ecchymoses make their appearance, as in bad typhus.

The duration of a fatal attack of plague varies from an hour or two to six or seven days. In the commencement of an epidemic the patient may sink down collapsed, under the intense impression of the constitutional symptoms, and die before there is any time for the characteristic eruption to make its appearance. On the other hand, the constitutional disturbance may be wanting, and the only sign of the disease be a bubo or two, the patient being never prevented from moving about and attending to his business; and between these extremes there is every possible shade of variety. If life is prolonged beyond seven days, the patient generally recovers. Convalescence is often greatly protracted by the

suppuration and healing of the buboes and earbuneles.

Between plague and epidemic earbunele, or furunele, there are many obvious points of connection. We saw, for example, a case, two years ago, in which the patient had a bubo in one of his axillæ, and several earbuneles, and where the constitutional symptoms were as typhoid and as rapidly fatal as in ordinary attacks of plague.

The treatment of plague differs in no respect from that of typhus, except in regard to the external signs—the earbuneles and buboes; and these must be dealt with on general principles. Warm fomentations or poultices, and the early evacuation of pus, if it form, are chiefly required for the buboes; while the earbuneles may be treated in one or other mode set forth in the section on furunele and earbunele.

EQUINIA GLANDULOSA.

SYN. Glanders, Farcy. *Fr.* Morve, Farcin. *Germ.* Rotz, Wurm.

Glanders occur in several forms; but that which is most common, as well as most typical,

is characterised by an eruption of small tumours and pustules, by profuse offensive discharge from the nose, by malignant fever, and by a marked disposition to gangrene in different parts.

The tumours, at first red and shining, hard and painful, soon either suppurate and give rise to foul ulcers, or else mortify. They vary in size from half an inch to one, two, or even several inches. They arise in different parts of the body, and are more numerous upon one side than the other. They are often connected with deep-seated abscess, and accompanied by enlargement and suppuration of the lymphatic glands, and by collections of matter in the joints and in various parts of the body.

The pustules are round, often umbilicated, varying in size from that of a pea to that of a mulberry, dark in colour (from their contents being for the most part bloody sanies), scattered over the body, but most abundant upon the face, head, and neck, where they are often confluent.

The patches are dark red and livid in colour, of various sizes, occurring chiefly on the sides of the nose, cheeks, or forehead, but not confined to these parts. Upon these patches, blebs, con-

taining a reddish serosity, not unfrequently make their appearance.

The discharge from the nose is at first deep yellow, afterwards of a bloody or dark sanious aspect, and extremely offensive to the smell as well as to the sight. Externally, the nose and face generally are swollen and red, and covered with livid freckle-like spots; internally, the lining membrane of the nose, and that of the cavities communicating with the nose, is at first inflamed and studded with clusters of small white irregular pustules, and afterwards ulcerated and mortified.

The fever may exist from the beginning, or it may come on later in the course of the disease. It is generally of a very malignant kind.

Glanders may happen in several different forms. It may be acute or chronic.

The commonest form begins with low fever, and free discharge from the nose; the eruption of tumours, pustules, and patches comes on about the eighth day; and death generally occurs, with exaggerated symptoms of malignancy, in the course of the third week. Sometimes death happens at an earlier period, before the eruption

makes its appearance; sometimes there may be discharge from the nostrils with very little constitutional disturbance at first, and the development of tumours may be deferred for several months; sometimes there may be no discharge from the nostrils, the development of the tumours being the first symptom attracting attention. The disease, indeed, occurs in many forms, but there is the most intimate connexion between them all. Thus the matter from one of the suppurating tumours may give rise to the form in which discharge from the nostrils and malignant fever are the primary symptoms. Or the discharge from the nostrils, in an acute case of this kind, may give rise to the more chronic form, in which the slow development of tumours is the chief characteristic. The latter case also may, as it progresses, change into the former; the system being, as it were, poisoned progressively, the malignant fever and the discharge from the nose being the result of this poisoning.

Glanders is produced by the direct inoculation with the diseased fluids of the glandered horse, ass, or mule. Glanders in the lower animals exhibit all the varieties which are seen in *equinia glandulosa* in man. The disease

may be acute or chronic, and these extremes may interblend in every way. When the tumours appear first in order, the disease is called *farcy*; when the discharge from the nostrils is associated with the tumours, the name given is *farcy glanders*, or *glanders*. The affection in horses appears to arise under analogous circumstances to those which give rise to fever in man; to wit, ill-ventilated stables, insufficient food, and so on.

A form of glanders, called *equinia mitis*, is produced by inoculation with the virus of horses suffering from "grease." This consists generally of pustules in the hand, very like those of ecthyma, attended with a good deal of local inflammation, sometimes with troublesome inflammation of the lymphatic glands and abscesses, and with some constitutional disturbance. But this affection is not truly glanders; it is, indeed, a very trivial malady compared with glanders.

The treatment of glanders must be conducted upon the same principles as those which are pursued in the treatment of any very low fever. If life can be saved, it must be by wine and other stimulants, in no ordinary

doses. Within the last five or six years, four or five cases have been recorded in which life was saved by large and repeated doses of ammonia; before that time all cases of the acute disorder had proved fatal. In order to relieve the ulcerated condition of the nostrils, the injection of various ehlorinated solutions, or a solution of creosote, may be of service. Abscesses should be opened as soon as formed, and ulcers treated on ordinary principles.

CHAPTER VIII.

MACULÆ.

MACULÆ, or *stains*, are of various colours, light or dark, and various sizes, many of them permanent, or disappearing very slowly. Maculæ may be of congenital origin, or they may be developed spontaneously. To this class of affections belong—

Lentigo,
Ephelis,
Albinismus,
Melanopathia,
Nitrate of Silver Stains,
Nævi.

1. LENTIGO.

SYN. Freckles. *Fr.* Taches des rousseurs; Bran de Judas. *Germ.* Sommerfleck.

The technical designation of freckles has been derived from the lentil-shaped spots

which mark the affection. Of a yellow or greenish-yellow colour, these spots differ considerably in size, but they rarely exceed the diameter of a split pea. They occur in every part of the body, although they are most abundant on those portions of the skin which are exposed to the light, as the face, neck, throat, and hands. Freckles are almost peculiar to blondes, and are most common in individuals who have red hair. The affection may be either congenital or acquired; and not unfrequently the spots, in whatever manner originating, after enduring some time, fade away without any assignable cause.

The most effectual treatment for freckles, if any be adopted, is the frequent application of a lotion consisting of bichloride of mercury, dissolved in an emulsion of bitter almonds, or in orange-flower water.

2. EPHELIS.

SYN. Sun-burn. *Fr.* Hâle. *Germ.* Sonnenbrand.

Sundry irregular light brown or yellow spots are apt to be developed by the powerful action of the sun's rays upon unprotected portions

of the skin, particularly if the skin be unduly sensitive. When the spots occur in irregular brown patches, the discoloration is known as *ephelis umbrosa*; when the spots are yellow and circular, as *ephelis lentigo*. The affection is peculiar to the summer months; and hence it is readily distinguishable from lentigo, which is independent of season.

The treatment of *ephelis* consists in the application of some soothing, stimulating application; as, for example, cold cream to which a little liquor plumbi diaacetatis has been added, bitter-almond lotion with a small quantity of rectified spirit, or glycerine. If the spots assume a chronic character, a bichloride of mercury wash must be made use of.

3. ALBINISMUS.

SYN. Albino Skin. *Fr.* Albinism. *Germ.* Leucathopie.

Albino skin is characterised by an entire absence of the colouring matter of the integument. The skin is commonly of an opaque white colour, like that of paper, milk, or white linen, and it is usually covered with a soft, white down. The hair is glossy, silken, soft, and

straight, but sometimes crisp and *crépu*, like that of a negro; the colour is singularly blanched—different from the whiteness of old age, and somewhat like that of unspun cotton or raw silk. The iris is of a pale rose colour, and the pupil red—there being an entire absence of pigment in the choroid and uvea. Albinoes (Fr. *bedas*, *kakerlaques*, *dondos*) are usually of delicate constitution and contracted intellect, and the sensibility of their eyes causes them to avoid the light.

General albinism occurs among all races of mankind, most commonly, perhaps, among the coloured races. Among negroes it is sometimes observed as an accidental affection, but in other races it is invariably congenital. It sometimes happens that whites, who have long sojourned in places deprived of light, undergo a species of etiolation, or blanching, which narrowly approaches albinism.

A partial albinism, which may be either a congenital or accidental malady, is occasionally observed among negroes; more rarely among whites. In this form of the disease, the skin presents, in divers places, white spots of various sizes. Negroes so affected are known as “pied

negroes," and the affection itself is popularly termed "piebald skin." When the white spots appear on parts covered with hair, the hair also is implicated, and rendered colourless.

Little or nothing is known of the causes which may lead to albinism, and when the affection is general it appears to be beyond the reach of medicine. In the partial affection, stimulating applications, and even blisters to the decolourised patches (the general state of the system being also attended to), have been made use of.

4. MELANOPATHIA.

SYN. Nigritism. *Fr.* Mélanisme. *Germ.* Melanismus.

Melanopathia (μέλας, black, and παθος, affection), is an augmentation of the dark colouring matter of the skin, commonly occurring in patches, and varying in shade from dusky brown to deep black. Very rarely the malady extends to the whole skin. The partial affection chiefly attacks the trunk and the limbs, but M. Leccat (quoted by Rayer) records a case in which the skin of the face was affected. A lady, he states, aged about thirty years, became

pregnant. In the seventh month of gestation, the forehead became of the colour of iron-rust, and afterwards, little by little, the skin of the whole face was changed to a most beautiful black, except the eyes and the borders of the lips, which latter retained their natural rose colour. The blackness was deeper on some days than on others. The head supported upon a very white body gave the impression of a head of black marble upon a neck of alabaster. The lady had naturally very black hair, but the portion which approximated to the skin seemed to become blacker still. There was no pain in the head, and the appetite kept good. The black colour disappeared two days after the accouchement; the perspiration of the face at that time tinged the linen with black. In a second and third pregnancy the lady suffered from the same phenomenon during the seventh month, but it ceased in the eighth.

The causes leading to melanopathia are very obscure, but recently increased interest has been given to the study of the affection, by one form of it (*bronzed skin*) having been attributed by Dr. Addison to disease of the supra-renal capsules. The circumstances under which Dr.

Addison has observed bronzed skin may be thus briefly summed up in his own words. He writes :—

“For a long period, I had from time to time met with a very remarkable form of general anæmia, occurring without any discoverable cause whatever; cases in which there had been no previous loss of blood, no exhausting diarrhœa, no ehlorosis, no purpura, no renal, splenic, miasmatic, glandular, strumous, or malignant disease. . . . The disease presented in every instance the same general character, pursuing a similar course, and, with scarcely a single exception, was followed, after a variable period, by the same fatal result. It occurs in both sexes, generally, but not exclusively, beyond the middle period of life, and, so far as I at present know, chiefly in persons of a somewhat large and bulky frame, and with a strongly marked tendency to the formation of fat. It makes its approach in so slow and insidious a manner that the patient can hardly fix a date to his earliest feeling of that languor which is shortly to become so extreme. The countenance gets pale, the whites of the eyes become pearly, the general frame flabby rather than wasted;

the pulse, perhaps, large but remarkably soft and compressible, and occasionally with a slight jerk, especially under the slightest excitement; there is an increasing indisposition to exertion, with an uncomfortable feeling of faintness or breathlessness on attempting it; the heart is readily made to palpitate; the whole surface of the body presents a blanched, smooth, and waxy appearance; the lips, gums, and tongue seem bloodless; the flabbiness of the solids increases; the appetite fails; extreme languor and faintness supervene, breathlessness and palpitations being produced by the most trifling exertion or emotion; some slight œdema is probably perceived about the ankles; the debility becomes extreme, the patient can no longer rise from his bed, the mind occasionally wanders, he falls into a prostrate and half-torpid state, and at length expires. . . . The great distinctive mark of this form of anæmia is the singular dingy or dark discoloration of the skin a dark, dingy, or smoky-looking discoloration of the integument.”¹

In the majority of cases of this character

¹ “On the Constitutional and Local Effects of Disease of the Supra-renal Capsules.” By T. Addison, M.D. 4to, 1855.

examined after death, Dr. Addison discovered a diseased state of one or both of the supra-renal capsules, and he suggested that this morbid change might be the cause of the anæmia, as well as of the changed colour of the skin. Subsequent observations, however, have not entirely borne out Dr. Addison's supposition, and certain experiments of Dr. Harley's have tended somewhat to throw doubt upon its correctness. The question is still undecided.

The treatment of melanopathia consists solely in attempting to rectify any manifest disturbance of the general health.

5. NITRATE OF SILVER STAINS.

After the long-continued internal use of nitrate of silver, it has happened that the whole surface of the body has become, first, of a bluish, and, subsequently, of a greenish slate tint, the change being most manifest in the parts exposed habitually to the light. In these parts, indeed, the tint has occasionally deepened to black. The discoloration thus far, whenever it has occurred, has proved to be permanent, although in some instances a slight diminution

in the depth of the tint has been observed to occur after a lapse of years. Thus far, moreover, the evil of discoloration has been unattended by any compensating good, and we have no sound excuse for pushing the drug within photographing limits. Our chief hope of affording relief in this unhappy contingency is in the use of iodide of potassium internally and externally.

6. NÆVUS.

Nævi, or natural marks, are divisible into two classes, those which depend upon a congenital change in the pigment-producing functions of certain circumscribed portions of the skin (*nævi pigmentosi*), and those which depend upon an alteration in the vascular tissue of the skin (*nævi vasculosi*).

(a) NÆVUS PIGMENTOSUS.

SYN. Mole. *Fr.* Signe, tache de naissance. *Germ.* Pigmentmuttermal.

Moles are of a brownish, yellowish, more rarely of a black, colour; they vary considerably in size; they are very slightly, if at all, raised above the level of the skin; and not unfrequently

they are covered with thick, bristly, unsightly hairs. They occur upon all parts of the body, but most frequently upon the back and face, half of the latter, not uncommonly, being occupied by one. The *nævus pigmentosus*, a congenital affection, is formed by a circumscribed portion of imperfectly organised skin, the pigment-producing property of which is morbidly increased.

When a mole is small, it may be destroyed by *potassa fusa*; when large, it may be extirpated by the knife.

(b) NÆVUS VASCULOSUS.

SYN. Mother's Mark. *Fr.* Tache sanguine, ou vasculaire.
Germ. Gefassmuttermal.

Mother's marks, or vascular *nævi*, are formed by a dilatation of the vascular network of the skin. It admits of doubt whether this affection be always a congenital one or not. The change in the blood-vessels may affect only an exceedingly small area, not exceeding that of a split-pea; or it may extend over a large surface, giving rise to a serious and formidable affection. The affection of the blood-vessels may be confined to

those of the skin itself, or to those of the tissue immediately beneath the skin. The colour of vascular nævi varies according as the arterial or venous capillary network is most involved in the diseased change. If the former system be most affected, the nævus may be of a bright red, or even scarlet colour; if the latter, it is of a livid, bluish colour. Between these extremes many shades of colour will be found; dependent upon the varying degrees of rapidity of the circulation through the nævus, as determined by changes in the system itself, or by the amount of dilatation of the blood-vessels.

Vascular nævi, when diminutive, give rise to little or no trouble. They may long remain stationary, but most commonly they enlarge gradually. Sometimes they attain a large bulk, and present the symptoms of aneurism by anastomosis. A large nævus is apt to become hot and painful, and to form a soft, pulsating tumour. If not meddled with, a vascular nævus may exist during a lifetime without giving rise to much inconvenience; but it may ulcerate, and, casting off a slough, give rise to serious if not fatal hæmorrhage.

The smallest-sized nævi may be destroyed by the application of caustic potash; the larger-sized may be dealt with by pressure, by cauterization or some other method of exciting inflammatory action within them, or by ligature.

When the nævus is only of moderate size, and but tardily increasing, and when it is situated over a bone, pressure uniformly applied by strips of plaster and a bandage is sometimes of great utility.

A more trustworthy method is that of exciting inflammatory action within the structure of the nævus, so as to occasion obliteration of the distended vessels. This method of treatment is peculiarly applicable to nævi which are chiefly located in the structures beneath the skin. The mode adopted may be either by passing a seton through the base of the nævus—the skein of silk being sufficiently large to fill up the punctured orifices fully, so as to prevent hæmorrhage; or by using caustic potash; or by puncturing the tumour freely and deeply with probes sheathed with lunar caustic.

The method of treatment most applicable to the larger nævi, principally affecting the skin, is extirpation by the ligature. The nævus

is transfixed with crucially arranged ligatures, and these are tied so as to include the whole of the base of the tumour. The ligatures require to be tightened after they have remained two or three days. The ulcerated surface left after the detachment of the nævus usually heals readily.

In nævi of extraordinary size affecting the side of the head, it has been necessary to tie the common carotid artery; but this remedy is as dangerous as it is unsatisfactory.

Mr. E. Wilson records two cases of vascular nævus in children, under his own observation, which were diminishing in size spontaneously, as if undergoing spontaneous cure.

In this place passing reference may be made to *Chromidrosis*, or coloured sweat. This affection is a rare one, but cases of blue, green, saffron, ruby, yellow, and blood-coloured perspiration are on record. Green perspiration is said to have resulted from the accidental ingestion of copper with the food. The treatment of chromidrosis must be conducted on general principles.

CHAPTER IX.

SYPHILIDÆ.

A MORDID state of the skin is one of the earlier and most important indications of the system having become tainted with the syphilitic poison; it is also one of the most remote effects of that poison. This morbid state may become manifest in any one of the different forms which skin diseases are apt to assume; but it is more commonly observed under certain forms than others. Thus, the skin affection induced by syphilitic pollution of the system may be exanthematous, vesicular, papular, squamous, pustular, or tubercular; but it is much more frequently observed in an exanthematous, papular, or squamous form, than in a vesicular, pustular, or tubercular. The general character of these different forms of eruption, when originating from syphilis,

does not differ very markedly from that which they possess when they arise idiopathically. Yet there are certain peculiarities belonging to syphilitic eruptions, which, duly considered, will commonly suffice to lead to a correct estimation of their nature. The leading characters of the syphilitic eruptions may be thus briefly summed up.

1. EXANTHEMATA.

An eruption of rose-coloured spots, which may be caused to disappear on pressure, but which immediately return on the pressure being removed. The skin around these spots is commonly of a dusky, yellowish, unhealthy hue. The hue of the spots gradually becomes darker and darker, until it assumes a marked coppery colour, and, at the same time, the spots become ineradicable by pressure. This is the common form of syphilitic eruption; it is unattended with fever or itching; it may be diffused over the whole body. The spots usually tend to a more or less circular and well-defined form, and, at times, two spots will be seen coalescing by some portion of their margin, and giving rise to a figure-of-eight outline. This

eruption is apt to appear in a suecession of crops; or to fade away, promptly re-appearing with an increased vividness of tint. It is important to note, that a syphilitic exanthem has been mistaken for an outbreak of measles; and that the rashes occasioned by the use of eopaiba for gonorrhœa and pityriasis have been regarded as syphilitic exanthems. The history and progress of the cases will usually suffice to correct an error in diagnosis.

2. VESICULÆ.

This form of syphilitic eruption is very rare, but when it occurs, it resembles a chronic eezema or herpes in its progress. The patches of eruption are generally surrounded by a copper-coloured areola. When the vesicles rupture, they not unfrequently leave exposed an ulcerated surface, which throws out a purulent discharge, rapidly drying into scabs. If the ulceration extends, moreover, these scabs may go on receiving additions from below, until they have the limpet-shell-like form of *rupia*.

3. PAPULÆ.

The papular syphilitic eruptions chiefly resemble *lichen* in character; but the papulæ soon tend to shrivel up, and to give place to a squamous state of the cuticle.

4. SQUAMOSÆ.

The syphilitic squamous eruptions assume the form of *lepra*, more commonly than that of *psoriasis*. Both forms of eruption are preceded by an outbreak of copper-coloured blotches, or by patches of papulæ. The syphilitic squamosæ do not differ so much from squamous affections arising idiopathically, as to render it an easy task, at all times, to distinguish the former affections by their aspect. The scales of the syphilitic squamosæ are perhaps thinner, less brilliant in appearance, and less persistent, being more frequently thrown off, than those of the idiopathic squamosæ. Syphilitic *lepra* often covers the whole body, and it may extend into the outlets of the mucous canals. As the scales fall off, they leave bare a foul ulcerated surface, or (in certain much-impaired states of the health) they are succeeded by copper-coloured tubercles.

5. TUBERCULÆ.

Syphilitic tubercles are broad and flat, of a dark-red or copper colour, sometimes of a purple or brownish hue. They are of a round or an oval form, and of different sizes, rarely, however, exceeding three fourths of an inch in diameter, and at times but little larger than the papulæ of lichen. Tubercles gradually suppurate and give rise to deep ulcers, which leave, on healing, a much-puckered cicatrix. The eruption in question may occur as disseminated tubercles, or in patches of tubercles. Syphilitic tubercles are usually one of the more remote effects of syphilitic contamination, and they commonly indicate a shattered constitution, either from congenital debility, privation, or debauchery.

Condylomata, or mucous tubercles, usually occur in irregular-shaped, flattened patches of red, papular, fungous-like growths, at the verge of the anus, within the cleft of the buttocks, around the mouth of the vagina, or the internal surface of the prepuce, or wherever two cutaneous surfaces are in close contiguity. The surface of condylomata secretes

a profuse, thin, fœtid discharge, particularly in the vicinity of the anus and genital organs. Patches of condylomata usually heal from the centre, and leave behind them a dark-coloured stain, which is often of long duration.

6. PUSTULÆ.

Syphilitic pustular eruptions are usually observed as a sequel to other forms of eruption. When the eruption is of an eethymatous character, which occasionally happens when the constitution is highly depraved, the pustules are succeeded by deep ulcers, which are not unfrequently capped by limpet-shell scabs (*rupia*).

As in idiopathic chronic skin diseases, it is not uncommon to witness several forms of syphilitic eruption on one and the same patient. Thus, a scaly eruption may be observed on the body, while a pustular exists on the trunk; or a papular and two different forms of scaly eruption (*psoriasis* and *lepra*) may be observed to exist at one and the same time; or tubercles may co-exist with a squamous eruption; or erythema, with any of

the different forms of eruption. These eruptions, moreover, with the exception of the erythematous, may be succeeded by ulceration, which, in the remoter periods of the disease, is often of a grave and very obstinate character.

Syphilitic affections of the scalp are often attended with baldness (*alopecia*); but we shall treat of this malady in the chapter on affections of the hair.

To distinguish syphilitic from non-syphilitic affections of the skin is a matter of the greatest moment; for upon this will depend our successful treatment of the former. There is no special symptom peculiar to syphilitic eruptions, which would enable us, in all cases, to say positively, from the aspect of the eruption, that it is of syphilitic origin. Such peculiarities as may be said to appertain to syphilitic eruptions indicate simply the probability that it may arise from a syphilitic source, and guide us in our inquiries into the early history of the case. In the majority of cases coming under the notice of the medical man, it usually happens that he can readily trace

out the origin of the cutaneous affection, the syphilitic infection being of comparatively recent date, or the primary consequences of the inoculation still existing. But when this does not happen, the chief circumstances connected with the eruption which will direct the attention of the observer to its probable syphilitic origin, and provoke the necessary inquiries into the previous history of the case, are, first, the absence of that pruritus or itching which is so very common an accompaniment of non-syphilitic eruptions, and, secondly, the presence of coppery colour, more or less marked. These tests are of much value, and in the majority of cases the conclusion to which they lead may be accepted without hesitation, but there are instances in which they fail. The test of itching fails with the syphilitic eruptions existing about the anus, or in the cleft of the vulva, and in localities where the discharge which may arise from the eruption may flow upon and irritate the surrounding skin. The copper-coloured test fails in its absolute application, as the same tint may be observed in ephelis and pityriasis, and occasionally, perhaps, in psoriasis. It is to the history of the case, there-

that, and in fact it is the only one of any system which may be found in the history of an empire. The system of the present is the only one which is the only one of any system which may be found in the history of an empire. The system of the present is the only one which is the only one of any system which may be found in the history of an empire.

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or suffering from any ehronic viseeral affeetion, or when he is of debauched and intemperate habits, the prognosis is doubtful; for, on the one hand, our most efficient remedies ean only be imperfectly made use of; and, on the other, we are often called upon to *cure the patient in spite of himself*; that is to say, he wishes to be eured, while, at the same time, he persists in indulging, as far as praetieable, his intemperate or debauched habits.

The most important portion of the treatment of syphilitie skin diseases is the general treatment, and this resolves itself ehiefly—due attention having been, and being given to the reetification of any disorder of the digestive funetions and seeretions, and to dietetic and hygienie rules—to the administration of mereury or iodide of potassium. If the use of mereury be not contra-indieated by any of the indieations presently to be noted, this drug is the most powerful medieament we possess for eontrolling or eradiating the eonstitutional effects of syphilis. It is to be administered so as slightly to touch the gums, this pereceptible action being kept up a sufficient length of time

to rectify or entirely remove the cutaneous eruption. No specific rules can be set down to guide the practitioner as to the time over which the mercurial action should be prolonged. This is entirely a matter of tact, of watchfulness, and of practice, guided by a knowledge of the circumstances under which the mercury would act injuriously.

Thus, mercury may occasion profuse purging, with griping. This is ordinarily obviated by combining the drug with opium or hyoscyamus, or, if this do not suffice, by substituting for the internal administration inunction or mercurial fumigation. Mercury may occasion an inflammatory state of the throat. If so, the use of the drug must be discontinued for a time, and then resumed in smaller doses. It may occasion profuse salivation, from a peculiar idiosyncrasy of the patient. We have seen four grains of blue pill give rise to the most formidable salivation, the tongue protruding from the mouth, and the gums and lining membrane of the cheeks being ravaged by sloughing ulceration. In such cases, or when the patient is very sensitive to the drug, mercury is inadmissible. It may occasion a

troublesome eezematous eruption (*eczema mercuriale*), when the drug must be given up, at least for a time. It may induce profound and dangerous prostration (*erethismus mercurialis*), or, as in a case now under our care, it may, even in very small doses, cause a peculiar depression, unfitting the patient for his ordinary duties. In such instances the drug is either to be discontinued altogether, or to be had recourse to only occasionally, and that with the extremest care. During the use of the medicament the symptoms of the disease may become exaggerated, the powers of the patient at the same time failing. Then, also, the drug must be put aside. Finally, mercury is, as a rule, not to be thought of, if the patient be of a serofulous diathesis, if he be pthisical, if he be suffering from granular disease of the kidney, if he be broken-down in constitution, or much debilitated, if there be any syphilitic affection of the bones co-existing with the morbid state of the skin, or if the skin be affected by ulceration of a phagedænic or gangrenous character. When none of these circumstances exist, the utility of mercury in syphilitic affections of the skin is usually most manifest, if its use be

sufficiently prolonged. When, however, any of the contra-indications named do exist, then iodide of potassium is our sheet-anchor.

The most ordinary and perhaps the most efficient mode of giving mercury, is by the administration of small doses (gr. iij to gr. v) of blue pill, night and morning, until slight sponginess and soreness of the gums are induced. This usually occurs in four or five days. Then the interval between the doses must be increased, and the mercurial action maintained four or five weeks, if needful. If the digestive organs will not bear the internal administration of mercury, inunction may be had recourse to, \mathfrak{zss} or \mathfrak{zj} of strong mercurial ointment being rubbed into the skin of the inside of the thighs and armpits daily; or mercurial fumigation may be substituted for inunction. In the most obstinate forms of syphilitic skin affection, the bichloride of mercury, in sixteenth-of-a-grain doses thrice a day, is, perhaps, the most suitable preparation.

When the iodide of potassium was first brought into use, it was thought that mercury would no longer be required in the treatment of

syphilitic affections of the skin. Experience, however, has not borne out this opinion. Iodide of potassium is, without doubt, of great value in those cases where mercury is inadmissible, and its use is free from many of the disadvantages which attend upon the use of mercury, but it is no worthy substitute for the last-named drug.

Iodide of potassium, when administered, commonly occasions an increased discharge of pale, straw-coloured urine, and sometimes it produces a slight degree of salivation. When pushed to excess, it may occasion feverishness, swimming in the head, and sundry unpleasant symptoms of nervous excitement. Occasionally, also, its use gives rise to pain in the stomach, and a disagreeable defluxion from the nostrils. The dose is from gr. ij to gr. v, thrice daily, given in simple solution or in compound decoction of sarsaparilla. Sometimes it is advantageous to give iodine in combination with iodide of potassium (*e. g.* gr. ss of the former with gr. j of the latter). And sometimes, where there is a marked cachectic state of the system, with much debility, it may

be well to substitute iodide of iron for iodide of potassium—3ss of the syrup, properly diluted, three or four times a day.

There are, however, a large series of cases where a mild mercurial, such as Plummer's pill, may be most advantageously used along with the iodide of potassium. Such are cases where there is an unusual sensitiveness to mercury, but still not so great as to debar one altogether from the use of the drug. Such, also, are those cases where there has been a recurrence of syphilitic constitutional symptoms, after the system had been thoroughly put under mercurial influence.

Within the last four or five years a strange attempt has been made in several parts of the Continent to cure constitutional syphilis by *syphilization*—that is, by inoculating and re-inoculating with the syphilitic virus until this virus ceases to take effect. As many as five hundred chancre have been produced in the same person under this mode of treatment. The practical result, as might be expected, has by no means redounded to the credit of the homœopathic dogma of *similia similibus curantur*. Only the

other day, indeed, a government prosecution was instituted in France against a practitioner who had made use of *syphilization*, and he was heavily fined.

The local treatment of syphilitic eruptions consists in the use of warm, vapour, and sulphur baths, or of stimulating and mercurial applications, as may be most expedient. The warm, vapour, or sulphur bath will be found most useful in treating the syphilitic exanthemata, vesiculæ, and papulæ ; mercurial fumigations, if not contra-indicated, will be found most valuable in treating the squamosæ, tuberculæ, pustulæ, and the ulcerated surfaces succeeding these eruptions. As applications, also, to obstinate patches of lepra, or to indolent ulcers, weak ointment of nitrate of mercury, or of red precipitate, or black-wash, will be most useful. Condylomata may be treated by the application of black-wash or calomel ointment, or by washing them with a solution of chloride of soda, and afterwards sprinkling them with calomel, and then applying dry lint.

BOOK II.

1. DISEASES OF THE HAIR.
2. DISEASES OF THE NAILS.

DISEASES OF THE HAIR.

THE hair is subject to several abnormal modifications in quantity, quality, or colour. It may be in curious tufts or patches in localities where hair is not usually present (*nævi pilares*), or it may cover the whole body so extensively that the unfortunate man or woman has the appearance of being cased in the hairy hide of an inferior animal. More frequently it may be of unusual length; thus the hair of the head has been known to reach to the ground, and one case is on record in which the hair of the pubis measured an ell and a half in length. We have seen a case in which the pubic hair of a middle-aged female was so inordinately developed as to interfere

somewhat with the manipulation necessary in a case of difficult parturition. In this instance, the whole of the vulva was surrounded by a dense beard of coarse, matted hair, several inches in length. Instances of an opposite kind, where the hair is wanting in quantity, and where parts are bald or partly bald which ought to be clothed, are more common than those in which hair is in excess, though very generally what is wanting in one place is made up elsewhere. Thus, a bald scalp is often atoned for by ample beard and whiskers. The hair, also, is no less variable in quality than in quantity. Often, for example, it may be crisp, hard, bristly, split at the extremity; occasionally, under the combined influence of greater neglect and more disordered digestion, it may be felted and inextricably entangled, so as to form a close resemblance to that pliose state of which more will be said presently. In some rare instances the hair has been observed to assume a preternatural colour, reddish-yellow, even green or blue. In the albino the colouring matter is never developed; in too many this matter disappears prematurely, and the hair puts on in youth or mid-life

the grayness or whiteness of age. Sometimes the hair is suddenly blanched, as in the well-known case of Marie Antoinette, in the dungeon of the Temple. Sometimes this blanching may be only partial. This is the case in a lady of our acquaintance whose story is this. Six years ago, after an illness of a week, she lost her husband. At the beginning of this illness she was perfectly well, in the prime of life, and with hair as black as jet ; at the end of the illness the right half of her “back-hair” had become quite white, and white it has continued to be ever since.

Among diseases of the hair, properly so-called, *Porriga*, or *Ringworm*, and *Plica Polonica* take rank almost without companions ; and these diseases, therefore, with *Alopecia* or *Baldness*—which puts in a humbler claim for notice—will form the subjects of the three following chapters—

Porriga,
Plica Polonica,
Alopecia.

CHAPTER I.

PORRIGO.

SYN. Scall, Scalled Head, Ringworm. Tinea, Tinea capitis. *Fr.* Teigne, Gourme. *Germ.* Grind, Hautkele.

PORRIGO is a specific disease of the hair-follicles and scalp, occurring mainly in childhood, and manifested in two forms—*porrigo scutulata* and *porrigo favosa*.

1. PORRIGO SCUTULATA.

SYN. Common or Scurfy Ringworm. Trichinosis furfuracea. Tinea tonsurans. *Fr.* Teigne, Gourme. *Germ.* Grind, Hautkele.

A circumscribed portion of hair, usually of a circular or oval form, first loses colour. The hair next becomes brittle, often breaking off either close to the scalp, or at various distances from it, and giving rise to a moth-eaten appearance—hence the name *tinea*. Unna-

turally pale throughout, the skin of the part is gradually covered with powdery scales, which closely surround the bases of the hairs, the follicles of which, swollen and projecting above the level of the morbid surface, give to the skin, in recent cases, an appearance not unlike that of *cutis anserina*. The affected hairs become much twisted and distorted, and very soon they have the aspect and colour of "tow." Occasionally, the diseased hairs are matted into bundles. As the affection progresses, and the brittle hairs become more or less destroyed, the diseased patches become more or less bald. Unless the patches of *porrigo scutulata* be irritated and caused to inflame by neglect, by scratching, or by the use of too stimulating applications, they have a dry, withered appearance. When irritated, pustules and scabs are apt to form upon the patches. The development of the disease is usually attended with more or less itching. Although *porrigo scutulata* most frequently occurs on the scalp, it also attacks other portions of the body. In these situations, where the hair-follicles are commonly less developed than on the scalp, the patches of *porrigo scutulata* have a slightly

reddish aspeet; they are covered with fine, furfuraceous scales; and their margin, slightly elevated above the surrounding skin, is papulated.

When the roots of the diseased hair are examined with the mieroseopce, it is found that the fibrous layer of the hair shaft and the lining mcembranc of the follicles are crowded with closely packed, transparent, globular, nucleated granules. These granules are regarded by some authorities as a parasitic plant, which has been named the *Trichophyton tonsurans*. This, Dr. Jenner writes, "is composed of spores only: the spores, however, are occasionally somewhat elongated, and arranged in a linear series. They are round or oval, and their diameter varies from 0.003 to 0.01 millimetres. The primary scat of the parasite is the root of the hair. Subsequently, it extends up into the substance of the hair, and even outwards, according to Bazin, on to the skin between the hairs." Mr. E. Wilson regards the appearances thus described as indicative simply of *granular degeneration* of the hair.

Porrigio scutulata is not unfrequently mis-

taken for *herpes circinnatus*—an affection which sometimes coexists with it.

2. PORRIGO FAVOSA.

SYN. Crusted Ringworm; Honey-comb Scall or Tetter; *Tinea favosa*. *Fr.* Teigne favreuse. *Germ.* Maichsgrind.

Porriigo favosa chiefly affects the scalp. It is characterised by the formation of bright-yellow, thick, dry, cupped, stinking crusts, slightly elevated above the surface, and having a well-defined circular or scalloped outline—a circular outline where solitary hair-follicles are affected, as in *favus dispersus*, a scalloped outline, from the coalescence of several crusts, where several contiguous follicles are diseased, as in *favus confertus*. The cupped appearance, to which the affection owes its name of *favus* or *honey-comb*, is caused by the peculiar way in which the crusts grow from their circumference. The colour is very striking—bright yellow, much brighter than that of pus. The size varies considerably, the smallest very small, the largest rarely or never exceeding one fourth of an inch in diameter. The odour is mouse-like, or rather like that of cat's urine, when the patient is warm and perspiring, and particu-

larly when the parts are ulcerated by dint of scratching. The skin surrounding the crusts is red, and rough and scurfy, but, unless as the result of scratching, it is not ulcerated. Ulceration, indeed, has no necessary part in the matter. Usually there is more or less itching, particularly in the early stages of the affection, but this is rarely a very prominent symptom. If otherwise, it will often be found that *pediculi*, which are apt to be developed in great numbers in porriginous affections, are entitled to no small share of the blame. On examination, each crust is found to be pierced about its centre by the shafts of one or two hairs.

The manner of growth is that of the ring-worm, growing from the circumference, and as growth goes on, healing at the centre. It does not do, however, to speak of healing in the full sense of the term, for the hair-follicles are destroyed during the progress of the affection and the skin is left thin, shining, and permanently bald.

In consequence of the irritation arising from the discase, or from the disease in conjunction with the accompanying pediculi, the glands of the neck are often enlarged and indurated.

A microscopical examination of the crust of *porrigo favosa* shows a granular, branching structure, which is generally considered to be a cryptogamic parasite, and which has been named the *Achorion Schonleini*. "This plant," Dr. Jenner writes, "has mycelium, sporule-bearing branches, and sporules. The sporules are round or oval, and their diameter varies, according to Gruby, from 0.003 to 0.01 millimetres. The vegetable growth is first perceptible between the layers of epithelium, just at the orifice of the hair-follicle; from this point it may spread downwards between the hair and its capsule, and upwards, around, and in the substance even of the hair." Mr. E. Wilson considers this so-called parasite as being simply an exaggerated form of the granular degeneration observed in *porrigoscutulata*; a conclusion not without importance in connection with the fact that the general causes of the two affections are the same, and that *porrigo favosa* is chiefly met with in those circumstances where these causes act with greatest intensity—to wit, among the poor.

Porrigo is undoubtedly contagious. Those who suppose that the affection is caused by

parasitical cryptogamic plants, explain this contagiousness by supposing that the spores of these plants are conveyed from one person to another, and that they grow where they find a fitting nidus; and this may be the correct explanation. Many affections, however, are contagious in and through the simple secretions of the affected parts, and therefore contagion may be effected without the instrumentality of spores. Of this there can be no doubt. Cryptogamic growths, moreover, are apt to make their appearance on ulcerated surfaces, as on aphthæ, and under many other circumstances in which they seem to be the consequence rather than the cause of the mischief. The part, so to speak, becomes *mouldy*, because it is tending to decay and death, for the same reason that obliges all decaying and dying or dead organic matters to become mouldy. The mould in many of these cases is obviously the consequence of the decay and death, not the cause. Hence, the cryptogamic growth of porrigo may only show that the hair-follicles in this affection are decaying—degenerating. This view has been recently advocated with much ability by Mr. Jabez Hogg. Be the *modus*

operandi of the contagion what it may, however, there is no doubt as to the fact of the contagion, provided there be a fitting *nidus*. All are certainly not affected, and those who receive the disease are precisely those in whom debility, scrofula, neglect of cleanliness, and so on, have induced a morbid state of the hair-follicles—a state of degeneration in which the appearance of a cryptogamic mould-like growth is not to be wondered at. At all events, debility and want of cleanliness may almost be regarded in the light of indispensable conditions in the causation of porrigo.

As might be expected from this view of the causes of porrigo, dietetics and hygienic management generally, are of primary importance in the treatment of the affection. We may rest assured that there is always something wrong in the nursery, in the bedroom, in the schoolroom, in the meals, or elsewhere, and that the correction of this something is our first concern. A change of air often acts like magic (so to speak) in removing an obstinate attack of porrigo, and it has happened that the skin affection has again returned when the child has been brought back to its ordinary residence—a

fact which furnishes a significant hint as to the character of the causes upon which the attack has originally depended, and by which it may be kept up. Indeed, the necessity of having suitable diet, pure air, and strict cleanliness, is the great reason why porriga is so much more difficult to treat successfully among the poor than it is among those who are placed in more favorable circumstances.

Next in importance, and in many cases of equal importance, is the general medical treatment of the patient. First, the bowels must be attended to, and any disposition to constipation kept in check by the occasional use of mild aperients, such as castor-oil. There will, however, be little trouble on this account if the diet be properly regulated. Secondly, the system must be flaccid, and its general tone raised, by some form of tonic, iron holding the first and most important position, and next to it, the mineral acids. The citrate, acetate, sesquichloride, or iodide of iron may be used, according to circumstances. It frequently happens that the use of one or other preparation of iron (the digestive organs having been and being carefully attended to, as far as circum-

stances will admit), has sufficed to bring about, in conjunction with local treatment, the cure of obstinate cases, even under the most unsatisfactory hygienic conditions. Under such circumstances, the use of cod-liver oil, along with the iron, is often of the greatest value. Cod-liver oil, which is to be spoken of rather as a dietetic remedy than a medicament, often proves of much use in those cases of the disease which are observed in serofulous children, or where there is evident mal-nutrition. In certain obstinate cases of *porrigo scutulata*, which have resisted the usual routine as well of general as of local remedies, we have obtained almost immediate advantage and effected a permanent cure by the internal use of iodide of potassium.

Finally, we come to the external treatment. In *porrigo scutulata* the first thing to be attended to is the perfect cleansing of the parts, and this is best effected by the use of yellow soap and water. Next, a moderately stimulating application is required, and for this purpose nothing is better than the unguentum hydrargyri nitratis, more or less diluted, or the nitrate of silver.

In the local treatment of *porrigo favosa*, it is requisite first to remove the crusts. This may be readily done by softening them first with oil, and then thoroughly washing the head with yellow soap and water, repeating the operation until the whole of the crusts are detached. Then the exposed surface must be treated by stimulating applications, in the same fashion as *porrigo scutulata*, the diluted ointment of nitrate of mercury, or nitrate of silver, or an ointment of which the stimulating agent may be croton oil (thirty drops to the ounce), or sulphur, or camphor, or iodide of sulphur, being had recourse to. Professor Graham, on the supposition that the essential cause of the local affection was a parasitic cryptogamic growth, recommended the use of sulphurous acid, or sulphite of soda—agents which are of known power in the destruction of such growths; but the practical result of adopting this suggestion does not appear to have been altogether satisfactory. Sulphurous acid gas is transmitted through water, until the latter becomes saturated. Two ounces of this solution is then to be diluted with six ounces of water, and lint soaked with the lotion thus

prepared is to be kept constantly applied to the affected surface. Any raw surface left by the removal of the crusts, after the use of the foregoing preparation, may be treated with oxide of zinc ointment.

CHAPTER II.

PLICA POLONICA.

SYN. Plicose Hair, Felted Hair; Trichosis plica. *Fr.*
Plique, Plique Polonaise. *Germ.* Witschelpf, Judenopf.
Pol. Gwoździec.

THIS malady, endemie in Poland, is oecasionally observed in the eountries adjoining. In the Middle Ages it prevailed over a much more extended area of Europe. The scalp becomes inflamed, swollen, and so exeessively tender that the gentlest touch of a single hair produes pain; the hair-follicles secrete profusely a visceous, reddish, fluid, which sheaths the hairs, and mats them together into solid pliose locks and masses; the hairs themselves are thickened and soaked throughout in the same fluid, for this oozes out when they are cut across. Swarming with lice, and giving out, in addition, a most offensive odour, nothing can be

more disgusting than a head of hair thus changed.

In some instances the growth of the hair is greatly exaggerated, and the separate locks hang down like long ropes. Sometimes the hair is matted into a single hard mass. Usually the affection is confined to the head, but in aggravated cases, it may extend to all parts which are naturally covered with hair—the pubis, the chin, the axillæ. During the continuance of the affection, the nails of the fingers and toes become rough, hooked, and discoloured.

When left to itself plica usually persists from ten to twelve months. After this period the disease subsides, and the diseased hair is cast off spontaneously.

Plica is chiefly met with among the impoverished classes, but by no means exclusively. It is usually found in insalubrious localities, on the banks of rivers and marshes; and an insufficient diet, damp and foul dwellings, uncleanness of person, and particularly the use of filthy unctuous applications to the hair, and of heavy woollen caps, would seem to be fostering causes of the malady.

As would be gathered from the causes chiefly active in producing the affection, the treatment is chiefly hygienic, dietetic, and tonic. The Poles think that the removal of the diseased hair, to facilitate local methods of treatment, is inadvisable.

CHAPTER III.

ALOPECIA.

SYN. Baldness. *Fr.* Chauveté. *Germ.* Fuchstäude.

The most noticeable forms of this affection are—

Alopecia partialis,
Alopecia syphilitica,
Calvities.

1. ALOPECIA PARTIALIS.

SYN. Limited, Partial, or Accidental Baldness; Tyria;
Ophiasis; Porrigo decalvans.

Partial or accidental baldness is an occasional result of impetiginous, eczematous, and other affections of the scalp, and it sometimes occurs as a sequel of severe febrile affections. The most curious variety is that described by Willan as *porrigo decalvans*. In this affection the hair is shed so as to leave one or more

circular or irregularly shaped bald spots, the skin of which presents a perfectly smooth surface to the eye and touch. There is no apparent eruption, but the microscope shows a parasitic formation, which has been termed the *Microsporon Audouini*. "This plant," writes Dr. Jenner, "is formed of branched filaments, on which the spores are developed. The spores are very small, from 0.006 to 0.005 millimetres. The seat of the growth is the outside of the hair, and it forms a sort of sheath around the hair, from the surface of the skin upwards, from 1 to 3 millimetres. Gruby first described this plant and its relation to *tinea (porrigo) decalvans*; and Robin says he can confirm the accuracy of Gruby's description."

2. ALOPECIA SYPHILITICA.

In this form of baldness the hair loses its glossy condition, and becoming harsh and brittle, breaks off or falls out, with more or less rapidity, over a greater or less extent of surface. This change is generally preceded by itching and tenderness of the scalp, and succeeded by pityriasis. It is, in fact, the consequence of one or other

form of syphilitic eruption, which persists after the loss of the hair. The diagnosis of the affection is that of the other syphilitic cutaneous disorders.

3. CALVITIES.

SYN. Senile Baldness; Diffused Alopecia. *Fr.* Calvitie.
Germ. Kahlheit.

Calvities is a natural consequence of advanced life, but it is not peculiar to old persons. The default of nutrition, atrophy of the hair, and loss of colour which precedes calvities, is not unfrequently observed in persons still in the prime of life, or who have not passed mid-life. Diffused baldness is an occasional result of mental anxiety and severe illness.

The treatment of baldness must be governed by the circumstances which accompany or precede the affection. When partial alopecia is the result of severe illness, or of any cause which has depressed the vigour of the system, the vital powers must be reanimated by medical, dietetic, or hygienic means, as the special case may require; while the scalp may be stimulated by

frequent bathing with cold water and brisk friction, and by the use of a stimulating application in the form of ointment or lotion, the best agent perhaps being cantharides. Spirituous washes, and embrocations containing essential oils, are also of value. When the baldness is the result of an eruption upon the scalp, the method most fitted for dealing with the eruption, according to the form it may assume, is that best adapted for treating the baldness. Syphilitic alopecia requires to be combated upon the principles laid down when speaking upon the treatment of the syphilidæ. Ointment of nitrate of mercury diluted, or of iodide of sulphur, will often be found most useful as local applications in these cases. Calvities does not admit of treatment in the aged; and in those who are not of advanced life, it can only be dealt with (if it can be dealt with at all) by looking principally to the general state of the system.

DISEASES OF THE NAILS.

THE nails are subject to various morbid changes in growth and texture, but the affection which chiefly concerns the practitioner, and which alone requires special notice, is *onychia*.

ONYCHIA.

Onychia is an inflammatory state of the root of the nail, involving, more or less, the contiguous structures, and accompanied by suppuration and ulceration. The ulcerated surface commonly throws out large, flabby, sensitive granulations, which not unfrequently give rise to a fetid discharge. The affection is generally obstinate and painful, and the loss of the nail is no uncommon result.

Onychia may occur as the consequence of an injury; it is a frequent result of what is popularly termed the *in-growing of a nail*; at times it happens spontaneously in persons of a serofulous habit; it is occasionally determined by syphilitic contamination; and it is sometimes the sign of a peculiar malignant affection.

Onychia, the consequence of a wound, must be treated as a simple injury, the least complex fashion of treatment being the best.

Onychia, the result of the so-called in-growing of the nail, is generally observed on the great toe, and is occasioned commonly by the undue pressure of the skin against an undressed nail, by an ill-fitting boot or shoe. Rest, scraping the offending edge of the nail, or the whole of the nail, until it becomes sufficiently thin to yield somewhat to the swelling, and touching the ulcerated surface with nitrate of silver, will generally suffice to bring about a cure.

Serofulous onychia is sometimes very obstinate. The local applications required are fomentations, poultices, water-dressing, or cooling lotions, according to the feelings of the patient; but these will often fail to make a satisfactory

impression until we have recourse to the general treatment which is demanded by the scrofulous cachexia.

The diagnosis of syphilitic onychia is that of other affections which depend upon syphilitic contamination of the system, as set forth in the chapter on the *Syphilidæ*; and the treatment is to be conducted on the principles laid down in the same chapter.

Ricord writes of syphilitic onychia—"We find here the same phenomena which we observed in iritis, and in the cutaneous eruptions; for onychia is, in fact, only an affection of the skin which surrounds the nail; and in this cutaneous attachment may be developed either ecchyma, papules, vesicles, &c. The matrix suffers, and the secretion of the nail gets greatly vitiated; or grows thick and nodulated; and this alteration is somewhat analogous to what takes place in inveterate psoriasis. There is also a great similarity between onychia and alopecia; they depend on morbid changes interfering with the secretion of those cuticular appendages."

Malignant onychia is the term applied to the affection when, arising without any mecha-

nieal cause, it puts on a peculiarly unhealthy appearance, and is protracted in its progress. The ulcerated surface has a ragged, livid hue, and discharges a fetid, sanious matter. The mischief sometimes extends to the bone; the pain is generally very great; and the malady sometimes persists for months. The best treatment is to put the patient under the influence of mereury, or of iodide of potassium and tonics where mereury is contra-indicated; and to apply to the diseased surface black or yellow wash, solution of bichloride of mereury, nitrate of silver, or arsenic (ʒij of Liquor Arsenicalis to ʒij of water).

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